



**Course** EPPS 2302.003  
**Course Title** Methods of Quantitative Analysis in the Social and Political Sciences  
**Professor** Dohyo Jeong  
**Term** Fall, 2023  
**Meetings** M/W 8:30–9:45 AM, FO 1.502

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### Professor's Contact Information

**Office Phone** 214-460-2611  
**Office Location** GR 3.318  
**E-mail Address** [dohyo.jeong@utdallas.edu](mailto:dohyo.jeong@utdallas.edu)  
**Office Hours** M/W 10:00 am–12:00 pm, virtual via Microsoft Teams. You can access the link in our eLearning course. In addition, I am available by appointment at a mutually agreeable time.

### General Course Information

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

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**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.

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**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.

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**Required Texts & Materials**

- Sullivan (2021). *Statistics: Informed Decisions Using Data*; 6<sup>th</sup> 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 9780135780275. Access Card with 18 Weeks of Access.
  - ISBN 9780135780275. Access Card with 24 Months of Access.
  - ISBN 978013578012. Online Direct with 18 Weeks of Access.
  - ISBN 9780136662105. Online Direct with 24 Months of Access.
- 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 with the ability to take logs, exponents, factorials, and powers should suffice. For example, the TI-36X Pro is widely available and retails for under \$30.

## Assignments & Academic Calendar

Week	Material
1: 8/21–8/23	Data Collection; Organizing and Summarizing Data Read: Chapters 1
2: 8/28–8/30	Organizing and Summarizing Data (cont.); Numerically Summarizing Data Read & Watch: Chapter 2                      Quiz 1 Due by 8/28 11:59 PM
3: 9/4–9/6	<b>NO CLASS 9/4 (Labor Day)</b> Numerically Summarizing Data (cont.) Read & Watch: Chapter 3                      Quiz 2 Due by 9/4 11:59 PM
4: 9/11–9/13	Describing the Relation Between Two Variables Read & Watch: Chapter 4                      Quiz 3 Due by 9/11 11:59 PM
5: 9/18–9/20	Probability Read & Watch: Chapter 5                      Quiz 4 Due by 9/18 11:59 PM
6: 9/25–9/27	Discrete Probability Distributions Read & Watch: Chapter 6                      Quiz 5 Due by 9/25 11:59 PM
7: 10/2–10/4	The Normal Probability Distribution Read & Watch: Chapter 7                      Quiz 6 Due by 10/2 11:59 PM
8: 10/9–10/11	Sampling Distributions Read & Watch: Chapter 8                      Quiz 7 Due by 10/9 11:59 PM
9: 10/16–10/18	Estimating the Value of a Parameter Read & Watch: Chapter 9                      Quiz 8 Due by 10/16 11:59 PM
10: 10/23–10/25	Hypothesis Tests Regarding a Parameter Read & Watch: Chapter 10                      Quiz 9 Due by 10/23 11:59 PM
11: 10/30–11/1	Inferences on Two Population Parameters Read & Watch: Chapter 11                      Quiz 10 Due by 10/30 11:59 PM
12: 11/6–11/8	Inference on a Categorical Variable Read & Watch: Chapter 12                      Quiz 11 Due by 11/6 11:59 PM
13: 11/13–11/15	<b>NO Meeting 11/13 (Conference): video lecture will be uploaded</b> Comparing Three or More Means Read & Watch: Chapter 13                      Quiz 12 Due by 11/13 11:59 PM
14: 11/20–11/22	<b>NO CLASS (Fall Break)</b>
15: 11/27–11/29	Inference on Least-Squares Regression Model & Mult. Regression Read & Watch: Chapter 14                      Quiz 13 Due by 11/27 11:59 PM
16: 12/4–12/6	Nonparametric Statistics Read & Watch: Chapter 15                      Quiz 14 Due by 12/4 11:59 PM Quiz 15 Due by 12/11 11:59 PM
<b>12/7–12/13</b>	<b>Final Exam Available (Online)                      Due by 12/13 11:59 PM</b>

### 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 some courses, instructors may have special attendance requirements; these should be made known to students during the first week of classes. Faculty have the discretion to set an attendance policy for their in-person meetings, but the absences due to COVID-19 cannot be counted against a quarantined student.

In this class, attendance will be taken at most (if not all) class meetings. Your final grade includes 30 points for attendance. You will receive a percentage of these points based on your attendance. For instance, if you attended 18 out of 20 classes, you would receive 90% of the 30 attendance points. You must be present when the roll is called to receive credit for attendance.

**Class Participation**

Regular class participation is expected. Students who fail to participate in class regularly are inviting scholastic difficulty. 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.

	<b>Item</b>	<b>Points</b>	<b>Total</b>
<b>Grading Criteria</b>	Best 12 of 15 Quizzes	60 Points	720 Points
	Attendance	30 Points	30 Points
	Career Development Activity	25 Points	25 Points
	Final Exam	225 Points	225 Points
	<b>Total</b>		<b>1,000 Points</b>

<b>Grading Scale</b>	A-: 90%–93%	A:94%–96%	A+ 97% and Up
	B-: 80%-83%	B: 84%–86%	B+: 87%–89%
	C-: 70%–73%	C: 74%–76%	C+: 77%–79%
	D-: 60%–63%	D: 64%–66%	D+: 67%–69%
		F: Under 60%	

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### *The Flipped Classroom Model*

This course uses the flipped classroom model. Materials for each week will be made available on Monday at 8:00 AM. Beginning with Chapter 2, you will find three or more 10-minute videos that explain core course concepts. **Watching the videos are not mandatory, but it is recommended that you do so before taking the quiz.**

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.

### *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.

### **Course Activities**

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 4. 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>
<b>Make-up Exams</b>	<p>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.</p>
<b>Extra Credit</b>	<p>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.</p>
<b>Late Work</b>	<p>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.</p>
<b>Special Assignments</b>	<p>There will be no special assignments.</p>
<b>Contacting the Professor</b>	<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., Professor Smith, Dr. Jones). 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><b>IMPORTANT:</b> 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> <p>You will receive an e-mail as a class through Orion and eLearning at your official University e-mail address. Should you wish to contact me about matters related to your academic standing (e.g., anything related to your grades), you must do so from your official University e-mail address. If you want to contact me to ask a question about the content of the course, please feel free to use whatever e-mail address is most convenient for you.</p>
<b>Comet Creed</b>	<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>
<b>Academic Support Resources</b>	<p><i>The information contained in the following link lists the University’s academic support resources for all students.</i></p> <p>Please go to <a href="http://go.utdallas.edu/academic-support-resources">http://go.utdallas.edu/academic-support-resources</a>.</p>

**UT Dallas  
Syllabus  
Policies and  
Procedures**

*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.*

*Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.*

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