

University of Texas Dallas
School of Economic, Political & Policy Sciences
EPPS 2302 Methods of Quantitative Analysis in the Social and Policy Sciences

Fall 2016

*****Preliminary Syllabus**

Instructor: Jacquelyn Cheun, MS, DTR
Class time: Monday & Wednesday 17:30-18:45
Classroom: CB3 1.306
Office: GR 3.610
Office hours: Monday & Wednesday 10:00-12:00 or by appointment
Email: jjc150830@utdallas.edu

Course Pre-requisites:

MATH 1314 (College Algebra), or equivalent.

Course Description:

This course introduces basic concepts and methods of statistical analysis used in different fields of social and policy science research to better understand 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 application of software to ease visualization and calculation. Students completing this course will be good consumers of statistical information and have a solid foundation for pursuing further study of quantitative analysis.

Course Objectives:

At the end of the course students should be able to:

1. Describe and utilize data.
2. Understand and apply probability and relevant concepts.
3. Create hypotheses and appropriately examine them.
4. Understand and utilize regression techniques.
5. Gather a working understanding of basic statistical software.

Required Course Materials:

Statistics: Informed Decisions Using Data, 4th Edition. Michael Sullivan, Pearson Publishing.
ISBN: 9780321757272.

Software: The primary software of the class is STATA. Six-month license of STATA is \$38. You can also complete class assignments using STATA in the GR 3.402 computer lab if you choose not to purchase a copy for your personal computer.

<http://www.stata.com/order/new/edu/gradplans/student-pricing>

Although STATA is the course medium, students may elect to do work in R if they choose.

Calculator: A basic calculator that can take square roots and raise numbers to powers is required.

Top Hat:

We will be using the Top Hat (www.tophat.com) classroom response system in class. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message.

You can visit tinyurl.com/TopHatStudentGuide for the Student Quick Start Guide which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system. An email invitation will also be sent to your school email account (if you don't receive this email, you can register by visiting our course website <https://app.tophat.com/e/196827>).

Top Hat will require a paid subscription, and the standard pricing for the cheapest option is \$24 for 4-months of unlimited access. For a full breakdown of all subscription options available please visit www.tophat.com/pricing.

Reading Assignments & Participation:

Students are responsible for reading the assigned materials from the text *before* each class session. You will be expected to discuss the readings and participate in all class activities. The lecture notes **will not** be available online, so it is in your best interest to attend every class.

Project:

Please see instructions on eLearning. Final projects are due **November 30 at 23:59** via the submission link on eLearning.

NO EMAIL SUBMISSIONS WILL BE ACCEPTED.

In-Class Quizzes:

In-class quizzes are worth 20 points each. The quiz material can include chapters, readings, lectures, and/or anything else related to the course. Quizzes will be open book and open note. NOT OPEN COMPUTER.

Make-up exams will not be given without documentation for a serious illness, death in the family, or required university-sponsored event.

Attendance and Participation:

Attendance will be mandatory. Attendance will be taken at the beginning of every class, via TOPHAT. Students who miss a class must obtain the notes from another student. Excused absences will only be given in the event of a serious illness, an emergency, or a mandatory school function. Documentation is required. Documentation will only be accepted prior to or 1 day after the missed class. Documentation can be turned in-person or via email. **Four or more unexcused absences will result in serious grade reduction. Please see grading for more information.**

Final Exam:

Final exam will be comprehensive. It will be open book, open note, NOT open Computer.

Make-up exams will not be given without documentation for a serious illness, death in the family, or required university-sponsored event.

Grading:

Project	1 at 400 points	400 points	40%
In-Class Quizzes	7 at 50 points each	350 points	35%
Attendance & Top Hat Participation	More than 4 unexcused absences = 0	250 points	25%
Total		100 points	100%

Range of Points	Range of Percentages	Grade
1000-895	89.5% - 100%	A
894-795	79.5% - 89.4%	B
794-695	69.5% - 79.4%	C
694-595	59.5% - 69.4%	D
594- 0	0% - 59.4%	F

Grades will be posted to eLearning throughout the course- students are expected to be aware of their status in the course as the course progresses. Students should contact the instructor to discuss any concerns with their course grade prior to the end of the semester. Also, in regard to a specific assignment grade (exam, in-class, etc.) the student must wait 24 hours after the grade has been posted to contact the instructor with any concerns. Students have up to five days of the grade being posted to discuss any concerns over specific assignments or within 5 days of the assignment due date if no grade was posted.

Classroom Etiquette:

Arriving late in class and leaving early are very disruptive to the instructor and other students. Please let an instructor know prior to the beginning of class if you absolutely must leave early and make sure your exit distracts others as little as possible. Please make every effort to respect others.

Disagreements are allowed and expected, but the focus should be on ideas rather than on the individual who expresses them. Signs of disrespect that will not be tolerated include but are not limited to, having background conversations when others are talking, packing up early when others are still talking or asking questions, and working on material for other classes. **Cell phones must be turned on SILENT.**

Contacting the Instructor:

The best way to contact the Instructor is through the UTD email system. Please put in the subject of your email the course you are in and your topic. For example, EPPS 2302: Question on Syllabus. Please allow 1-2 *business days* for a response. In regards to grades, please wait 24 hours after grade is posted to email your concerns to the instructor.

Acceptable Student Behavior:

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UTD. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Center for Student Rights and Responsibilities to consider whether the student's conduct violated UTD's Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classrooms,

labs, discussion groups, field trips, etc. UTD's Code of Student Conduct can be found at <http://policy.utdallas.edu/utdsp5003> .

Disability Statement:

Students requesting accommodations and services due to a disability are required to provide the authorization letter issued by the Office of Student Access Ability (OSA) before their requests can be processed. Attempts will be made to meet all certified requirements. For more information contact the Office of Student Access Ability (OSA) at 972-883-2098 or <http://www.utdallas.edu/studentaccess/>.

Comet Creed

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:

“As a Comet, I pledge honesty, integrity, and service in all that I do.”

Helpful Resources

The Office of Student Success operates the Student Success Center

(SSC, <http://www.utdallas.edu/studentssuccess>), which offers assistance to students in the areas of writing, mathematics, communication, multiple science fields, reading, study skills, and other academic disciplines. These services are available through individual and small group appointments, workshops, short courses, and a variety of online and instructional technologies. All students enrolled at UT Dallas are eligible for these services.

Academic Integrity

Academic Dishonesty: The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrates a high standard of individual honor in his or her scholastic work.

Academic dishonesty can occur in relation to any type of work submitted for academic credit or as a requirement for a class. It can include individual work or a group project. Academic dishonesty includes, plagiarism, cheating, fabrication and collaboration/collusion. In order to avoid academic dishonesty, it is important for students to fully understand the expectations of their professors. This is best accomplished through asking clarifying questions if an individual does not completely understand the requirements of an assignment.

Additional information related to academic dishonesty and tips on how to avoid dishonesty may be found here: <http://www.utdallas.edu/deanofstudents/maintain/>.

Definitions:

The following were found in UT Dallas's Student Code of Conduct:

Plagiarism: The adoption or reproduction of ideas, words, statements, images or works of another person as one's own without proper acknowledgement.

Cheating: Using or attempting to use unauthorized materials, information, or study aids in any academic exercise. Academic exercise includes all forms of work submitted for credit or hours.

Fabrication: Falsification or creation of any information, data or citation in an academic exercise.

Collaboration and/or Collusion: Seeking or providing aid to another student in completion of any assignment submitted for academic credit without permission from the faculty member.

*****All assignments including (but not limited to) problem sets are subject to review. If a student is caught submitting coursework that is against UTD Academic Dishonesty policy. It will be a zero.**

NOTE: I reserve the right to alter the syllabus to better suit the needs of the class.

Tentative Course Schedule

Week	Dates	Topic	Assignments
1	Aug 22 Aug 24	Course Introduction/Math Lab Speaker Data Collection, Design and Sampling (Ch. 1)	
2	Aug 29 Sept 31	Organizing and Summarizing Data (Ch. 2) Descriptive Statistics – I & II (Ch. 3)	
3	Sept 5 Sept 7	No Class Probability I (Ch. 5)	Quiz #1 Ch. 1-3
4	Sept 12 Sept 14	" " Discrete Probability Distributions (Ch. 6)	
5	Sept 19 Sept 21	Normal Probability Distributions (Ch. 7) " "	Quiz #2 Ch. 5-6
6	Sept 26 Sept 28	Sampling Distributions (Ch. 8) Estimating the Value of a Parameter (Ch. 9)	Quiz #3 Ch. 7
7	Oct 3 Oct 5	Hypothesis Tests (Ch. 10) Inferences of Two Samples (Ch. 11)	
8	Oct 10 Oct 12	Analysis of Variance (Ch. 13) " "	Quiz #4 Ch. 8-11
9	Oct 17 Oct 19	Scatter Diagrams and Correlations (Ch. 4) " "	Quiz #5 Ch. 13
10	Oct 24 Oct 26	Least Squares Regression (Ch. 14) " "	
11	Oct 31 Nov 2	Categorical Data (Ch. 12) " "	Quiz #6 Ch. 4, 14
12	Nov 7 Nov 9	Nonparametric Statistics (Ch. 15) " "	
13	Nov 14 Nov 16	Applied STATA	Quiz #7 Ch. 12, 15
14	Nov 21 Nov 23	No Class No Class	
15	Nov 28 Nov 30	Work on Project	Project due
16	Dec 5 Dec 7	Review	Quiz #8