

The University of Texas at Dallas
School of Economic, Political and Policy Sciences
EPPS 3405.501 Introduction to Social Statistics with Lab
Spring 2015
Time: Monday/Wednesday 7:00-9:00pm
Classroom: GR 3.402A and B

Professor: Dr.Valente

Email: rubiavalente@utdallas.edu

Office: GR.3.810

Office Hours: Monday/Wednesday 5:00pm - 6:00pm and by appointment

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General Course Information

This course introduces students to the basic tools of statistics and shows how they are used in the analysis of social science data. A fundamental understanding of these tools is a critical foundation for social science research in many fields. The course covers descriptive statistics, inference from samples, hypothesis testing and the basics of regression analysis. This course is required of all social science majors and is a prerequisite for a required course in social science research methods within each discipline (for example CRIM 3304, ECON 3304, GEOG 3304, PA 3304, or SOC 3304).

Course Prerequisite: College Algebra (Math 1314 or equivalent).

Course Format and Objectives

As in any statistics course, this class requires much work in and outside of the classroom. Active and informed participation is expected from every student. Class sessions will be a combination of lecture, discussion, and in-class exercises. Lecture material is intended to supplement, not review, the readings. Because the readings are a major source of learning, students are expected to study this material as it is assigned and come to class ready and prepared. At the end of this course students will be able to:

- Describe and explain the basic concepts of sample and population
- Understand and apply concepts of probability
- Formulate and test hypotheses in research models
- Apply statistical models to real world research questions
- Compute and interpret statistics in context
- Connect statistical findings to population and draw inference.

Reference Textbooks and Materials

Moore, Notz, Flinger. *The Basic Practice of Statistics*, 6th edition. W.H. Freeman & Co.

(It does not matter if it's hardcover, softcover, loose-leaf or e-Book. Also, it doesn't matter if the CD is missing)

Software: STATA 11 or 12. You only need to purchase STATA if you want a copy for your personal computer. If you do not purchase it, you can still complete all the class assignments in EPPS computer labs, which all have STATA installed.

If you'd like to purchase it the simplest method is a 6-month lease for Small STATA software with PDF documentation (\$32 plus shipping and taxes). Be sure to include your utdallas.edu email when ordering: <http://www.stata.com/order/new/edu/gradplans/gp-direct.html>

A basic calculator that can take square roots and raise number to powers is required.

Hand-outs to be given in class. Additional material will be posted on e-Learning.

Recommended Texts and Materials

Statistics for People Who (Think They) Hate Statistics by Neil J. Salkind: Excel 2010 edition, Sage Publications. ISBN 978-1-4522-2523-4

A Gentle Introduction to STATA, by Alan Acock, (2012) Revised 3rd Edition. Stata Press.

Using STATA for Quantitative Analysis, by Kyle Longest (2015), 2nd Edition

Course Requirements

Homework: Throughout the semester you will have several take-home assignments. Turning assignments on time is expected from all students. However, I will accept late homework without penalty within 4 hours of its deadline. You will be penalized one full grade per day after the deadline and no assignments will be accepted after three days. No exceptions.

Quizzes: In order to ensure adequate reading of the textbook and comprehension of materials, throughout the semester you will have several quizzes. It is therefore imperative that you come to class well prepared. There will be no make-up sessions on quizzes, so please think twice before missing class or arriving late as the quizzes are given out at the beginning of class.

Exams: Students will have three exams during the semester. These are designed to test your knowledge and understanding of materials covered in the readings and lectures. The exams are not cumulative. If you are late for an exam, you will not be given any extra time. If you know in advance that you will be unable to take any of the exams on the scheduled dates, please let me know at least a week in advance so arrangements can be made ahead of time. *A make-up exam*

will be administered only if legitimate, written documentation is provided within three days of the scheduled exam date. If you are ill on the day of the exam, or have a family emergency (ex. death of a family member) you are required to provide written documentation pertaining to the reason for your absence. Also, it is your responsibility to email or call me BEFORE the scheduled exam time, so I know that you will be absent due to an illness or family emergency.

Extra-Credit: Students should focus on getting the actual coursework done first, before requesting extra credit. However, if there is an opportunity it will be announced in class and it will be offered to everyone.

Graded Activities:

Grading Scale:

Homework	25%
Quizzes	15%
Exam I	20%
Exam II	20%
Exam II	20%

Min	Max	Grade	Min	Max	Grade	Min	Max	Grade
97.0	100	A+	93.0	96.9	A	90.0	92.9	A-
87.0	89.9	B+	83.0	86.9	B	80.0	82.9	B-
77.0	79.9	C+	73.0	76.9	C	70.0	72.9	C-
67.0	69.9	D+	63.0	66.9	D	60.0	62.9	D-
0.00	59.9	F						

Course Policies

This syllabus is subject to revisions and changes at the discretion of the Professor. Any changes will be discussed in class and posted on e-Learning so you can plan accordingly.

Attendance policy: Regular class attendance and participation will be a deciding factor in all assignments and grades. **Three unexcused absences will be allowed; a fourth unexcused absence will automatically lower your final grade three points.** If there are more unexcused absences, the same policy will apply subsequently, which could make you have to repeat the course. An unexcused absence refers to missing class for a non-university approved reason or personal reason other than sickness and/or family emergency. Last minute emails and/or phone calls will not be accepted, unless in the case of a proven medical emergency. Only university-approved reasons and illness with written proof by doctor will be accepted as student absences, and must be reported within three days of the absence date. **Regular tardiness can be a distraction to the class and a sign of disrespect to the professor, thus three incidents will equal one unexcused absence.** If you need to leave early, please let me know in advance at the beginning of class.

Technology policy: Technology both within and outside the classroom should enable your learning experience, not hinder it. Cell phones are to be turned off during class. Each of you have a computer in this classroom. Use it wisely to take notes, see slides or work on STATA. If you use the computer to surf the web on non-class related sites, know that you are doing so at your own risk. Be mindful of those seating close to you. Bottom line: you are wasting valuable time.

e-Learning: e-Learning is used a lot in this class. This is how I will communicate with you. It is your responsibility to check e-Learning on a regular basis. You are responsible for announcements made through e-Learning. Also, please select a forwarding address in your mail preferences if you do not regularly check your utdallas email.

Classroom Citizenship: I expect students to be attentive during class and to be courteous and polite during discussions. You are expected to listen respectfully to me and to other students when speaking. Racism, sexism, homophobia, classism, ageism and other forms of bigotry are inappropriate to express in this class. I respect all students and viewpoints and expect you to extend the same courtesy to your classmates and to me. Disruptive students will be asked to leave and may be subject to disciplinary action.

University Policies

Information on university policies related to this and other classes may be found at <http://go.utdallas.edu/syllabus-policies>

General Warning:

Scholastic dishonesty will be severely punished. The student will be subject to university disciplinary proceedings. The *UTD Undergraduate Catalog* defines scholastic dishonesty as the following: “Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a degree, and/or the submission as one’s own work of material that is not one’s own. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or falsifying academic records.”

Class Schedule

Week 1	Jan. 12	Introduction to the course Lecture Topic: Intro to Statistics and Syllabus Reading: Check e-Learning
	Jan. 14	Lecture Topic: Reliability and Validity Ch. 8: Lab 1
Week 2	Jan. 19	No Class – Martin Luther King Day
	Jan. 21	Lecture Topic: Descriptive Statistics and Central Tendency Ch. 2: Lab 2
Week 3	Jan. 26	Lecture Topic: Variability Ch. 2: Lab 3
	Jan. 28	Lecture Topic: Frequency Distributions Ch. 1: Lab 4

Week 4	Feb. 2	Exam I Due: HW # 1
	Feb. 4	Lecture Topic: Hypothesis Testing Ch. 7: Lab 5 Due: HW # 2
Week 5	Feb. 9	Lecture Topic: Probability Ch. 10
	Feb. 11	Lecture Topic- Normal Curves Ch. 3: Lab 6
Week 6	Feb. 16	Lecture Topic: Significant levels Ch. 11, 15: Lab 7
	Feb. 18	Lecture Topic: The Z-test Ch. 20 Due: HW # 3
Week 7	Feb. 23	Lecture Topic: T-Tests Ch. 18
	Feb. 25	Lab 8 - T-Tests Due: HW # 4
Week 8	March 2	Lecture Topics: T-Tests Ch. 19
	March 4	Lab 9 – T-Tests
Week 9	March 9	Review for Exam II Due: HW #5
	March 11	Exam II in class
Week 10	March 16	No class: March 16 and March 18
	March 18	Happy Spring Break!
Week 11	March 23	Lecture Topic: Z-Test Reading: No Chapter
	March 25	Lecture Topic: Analysis of Variance Ch. 25 Due: HW # 6

Week 12	March 30	Lab 10 Analysis of Variance Ch. 25
	April 1	Lecture Topic: Correlation Coefficients Ch. 5 and 24: Lab 11
Week 13	April 6	Lab 12: Correlation Coefficient Ch. 5 and 24
	April 8	Lecture Topic: Linear Regression Ch. 5: Lab 13 Due: HW # 7
Week 14	April 13	Lab 14: Linear Regression Ch. 5
	April 15	Lecture Topic: Chi-Square and other Nonparametric Tests Ch.23 and 26: Lab 15
Week 15	April 20	Lab 16: Chi-Square and other Nonparametric Tests Due: HW # 8
	April 22	Review for Final Exam Due: HW # 9
Week 16	April 27	<i>No class - study on your own</i>
	April 29	Final Exam

Don't forget to fill out the course evaluation!

Have a great summer!

