

## SYLLABUS-- SOCY 5111 DATA 1 -- SPRING 2020

[M 3:00-5:30 pm; KTCH 1B40]

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### Objectives

At the end of this course students should a) demonstrate mastery of fundamental concepts of inferential statistics; b) be able to use STATA to read and manage data sources, c) be able to use STATA to perform univariate, bivariate, and introductory multivariate analyses; d) be able to write about the methods used and the results obtained in the analyses in part C. This class sets the foundation for more advanced statistical analyses in Data 2 and it is a critical component of your graduate training in sociology. When you are finished with this class, you should have the requisite tools to do original empirical research on your own using existing quantitative data sources.

**Course Materials:** All readings (other than the books), handouts, datasets, etc. will be available on Canvas.

### Required Texts:

1. A Gentle Introduction to Stata, 4rd Edition. Alan C. Acock --ISBN-13: 978-1-59718-142-6
2. Essentials of Social Statistics for a Diverse Society – Anna Leon-Guerro and Chava Frankfort-Nachimas (3<sup>rd</sup> Edition) – ISBN 13: 978-1-5063-9082-6 (paper back)
3. Applied Regression: An Introduction – Michael S. Lewis-Beck –ISBN-13: 978-0803914940

### Assessment

*Homework:* There will be weekly homework assignments that will be posted to D2L and are comprised of a combination of written work, problems from the text book, and computer programming using STATA. The assignments are scored from 0 to 10.

*Quizzes and in-class activities:* We will have a number of very small in class quizzes. In general these quizzes will pertain to a particular type of programming or analysis using STATA. We will also have group based activities each week.

*Examinations:* there will be two in-class examinations. The examinations will require you to demonstrate knowledge of statistical concepts and to perform statistical analysis either by hand or using STATA.

*Final paper:* I will ask each student to write a short (they are usually about 10-15 pages) paper using data from the General Social Survey (note: If you have access to another data source and would prefer to use those data, please contact me so that we may discuss this option). ***The papers should be written on your own.*** The papers need at least 3 tables/ 2 figures. Students will present papers during the last week of class.

*Final grade:* your final grade is based on your performance on homework, quizzes, examinations, final paper, and participation. Specifically, the following weights will be used to assess your score: Homework: 25%; Quizzes and In Class Activities: 25%; Examinations: 25%; Final paper: 25% (this includes your final presentation)

## Schedule and Important Dates

Date	Activity	Content	HW	Due	Reading
13-Jan	Lecture 1	STATA	HW1	27-Jan	Stata: Ch. 1-2
20-Jan	<b>MLK Day</b>				
27-Jan	Lecture 2	STATA	HW2	3-Feb	Stata: Ch. 3-4
3-Feb	Lecture 3	Descriptive Statistics	HW3	10-Feb	LG 1-4; ST 5
10-Feb	Lecture 4	Probability Distributions	HW4	17-Feb	LG 5-6
17-Feb	Lecture 5	Conf. Int. and Hyp Testing	HW5	24-Feb	LG 7-8 ( to 214) Stata: 162-4
24-Feb	Lecture 6	Diff in Means and Prop	HW6	2-Mar	LG 214-228; ST 154-169
2-Mar	<b>Exam 1: 3:00-5:30</b>				
9-Mar	Lecture 7	Chi-square and ANOVA	HW7	16-Mar	LG 9 (to 250) 10; ST 6.2-3
16-Mar	Lecture 8	Correlation and Regression	HW8	30-Mar	LG 11; ST 8
23-Mar	<b>Spring Break</b>				
30-Mar	Lecture 9	Variable types and assumptions	HW9	6-Apr	Lewis Beck
6-Apr	Lecture 10	Multivariate Regression	HW10	13-Apr	Lewis Beck
13-Apr	Lecture 11	More independent variables	HW11	20-Apr	Lewis Beck
20-Apr	Lecture 12	Model building and non-linear	HW12	27-Apr	Lewis Beck; ST 10
27-Apr	<b>In Class Presentations</b>				
4-May	<b>Exam 2: 7:30-10:00 and Papers Due by 7:30pm</b>				

**Accommodations:** If you qualify for accommodations because of a disability, please submit to your professor a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at 303-492-8671 or by e-mail at [dsinfo@colorado.edu](mailto:dsinfo@colorado.edu). If you have a temporary medical condition or injury, see [Temporary Injuries guidelines](#) under the Quick Links at the [Disability Services website](#) and discuss your needs with your professor. **Religious participation:** Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. See [campus policy regarding religious observances](#) for full details. **Behavioral expectations:** Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity and gender expression, age, disability, and nationalities. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. For more information, see the [policies on classroom behavior](#) and [the student code](#). **Discrimination and Harassment:** The University of Colorado Boulder (CU-Boulder) is committed to maintaining a positive learning, working, and living environment. CU-Boulder will not tolerate acts of sexual misconduct, discrimination, harassment or related retaliation against or by any employee or student. CU's Sexual Misconduct Policy prohibits sexual assault, sexual exploitation, sexual harassment, intimate partner abuse (dating or domestic violence), stalking or related retaliation. CU-Boulder's Discrimination and Harassment Policy prohibits discrimination, harassment or related retaliation based on race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. Individuals who believe they have been subject to misconduct under either policy should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127. Information about the OIEC, the above referenced policies, and the campus resources available to assist individuals regarding sexual misconduct, discrimination, harassment or related retaliation can be found at the [OIEC website](#). **Honor Code:** All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to [the academic integrity policy](#) of the institution. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access, clicker fraud, resubmission, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code Council ([honor@colorado.edu](mailto:honor@colorado.edu); 303-735-2273). Students who are found responsible of violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code Council as well as academic sanctions from the faculty member. Additional information regarding the academic integrity policy can be found at <http://honorcode.colorado.edu>