

Social Statistics

SOC 3112-090 (online)

Fall 2017

4 credit hours

Instructor: Guadalupe Aguilera

Communication method: Canvas email

Office: BEHS 419

Office Hours: By appointment

Teaching Assistant: Kelly Huynh (only available online)

Communication method: Canvas email

Course Overview

Course Summary

This course meets the General Education Quantitative Reasoning B (QB) requirement and the Bachelor of Science degree Quantitative Intensive (QI) requirement at the University of Utah. The goal of this course is to equip students with basic calculation and interpretation skills used in statistical analyses and quantitative social science research. The course begins with a discussion of descriptive statistics, including frequency distributions, graphs, and measures of central tendency and variability. Next, the course offers an introduction to inferential statistics, including t-tests, ANOVA, and chi-square. Finally, the course examines relationships between variables and measures of association, including bivariate regression and correlations. Ultimately, this course will prepare students for an increasingly information-based society by improving or gaining the ability to use data and critically evaluate data. Students will also improve or gain the ability to assess the strengths and limitations of quantitative research and uses in daily life.

Course Objectives

Throughout the semester, this course will address the following Learning Outcomes: Critical Thinking, Quantitative Literacy, and Foundations & Skills for Lifelong Learning. Homework assignments and class work will assess each student's ability to define, calculate, and interpret statistical concepts. At the end of this course, the student will be able to:

- Critically read and interpret the news and other sources of information
- Explain statistical ideas in the social sciences
- Summarize, compute, and graphically present statistics
- Interpret and compute inferential statistics based on samples
- Apply probability theory to test hypotheses
- Differentiate between various statistical techniques
- Identify appropriate statistical techniques for particular variables and research questions
- Explain basic concepts and interpretations of regression analyses

General Approach to the Course

All materials will be handled via Canvas. Homework is open in the Quizzes tab during the week of the given topic. In addition to chapter readings, PowerPoint lectures, and lectures found at www.sociology3112.com, the homework may also be helpful as study material for exams. The required labs complement lectures and are also found in the Quizzes tab. The use of Canvas Discussions are highly encouraged, as the course material may be overwhelming at times.

Course Materials

- **Required:** Chava Frankfort-Nachmias and Anna Leon-Guerrero. 2014. *Social Statistics for a Diverse Society* 7th Edition. Thousand Oaks, CA: Sage Publications.
- Lectures found at www.sociology3112.com are also required.
- PowerPoint lectures found in the Files tab on our Canvas page.
- Basic calculator (with the square root function)

Course and University Policies

- Late work is not accepted without advanced notice.
- Academic Misconduct Statement: Per University of Utah regulations (Policy # 6-400). "A student who engages in academic misconduct," as defined in Part I.B. and including, but not limited to, cheating, falsification, or plagiarism, "may be subject to academic sanctions including but not limited to a grade reduction, failing grade, probation, suspension or dismissal from the program or the University, or revocation of the student's degree or certificate. Sanctions may also include community service, a written reprimand, and/or a written statement of misconduct that can be put into an appropriate record maintained for purposes of the profession or discipline for which the student is preparing." More information can be found at <http://regulations.utah.edu/academics/6-400.php>.
- Addressing Sexual Misconduct: Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).
- The Student Code: Students and faculty at the University of Utah are obligated to behave in accordance with the ordinances of the University. The Student Code (or Students' Rights and Responsibilities) is located on the Web at: <http://www.admin.utah.edu/ppmanual/8/8-10.html>. You are encouraged to review this document. All of the rights and responsibilities applicable to both the student and the faculty member will be observed during the semester.

Student Support Resources

Americans with Disabilities Act (ADA) Statement

The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the [Center for Disability Services](#), 162 Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations.

Wellness Statement

Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of

Utah. For helpful resources contact the Center for Student Wellness --www.wellness.utah.edu; or 801-581-7776.

Assessments

Homework (25%): A total of 10 assignments (including one that is extra credit) will be due on Canvas by 11:59pm on Mondays. Homework will consist of questions from the end of each assigned chapter. Answers will be available the day after the homework assignments are due, thus late work will not be accepted. Further instructions for each assignment can be found in Canvas under the **Quizzes tab**. In addition to readings from the required textbook and the lectures, use the homework assignments as study material for exams.

Labs (15%): To complete labs (5 total), you will need data (provided), access to SPSS (provided) and to download the Citrix receiver.

- **Lab instructions and questions** can be found on our Canvas portal under the **Quizzes tab**
- **Lab data** can be found under the **Files tab** in a folder called Data.
- **Lab video tutorials** can be found at www.sociology3112.com.
- **SPSS** is accessed remotely via the Citrix receiver found at www.apps.csbs.utah.edu.
- **Instructions for Citrix setup** can be found [here](#).

Lab questions must be filled out online and output must be submitted as a PDF or Word document on Canvas by 11:59pm on the date they are due (labs are also always be due on Mondays). Please contact the College of Social and Behavioral Science Computing [Helpdesk](#) during the first week of class if you encounter difficulties with the Citrix setup process or the Statistical Package for the Social Sciences (SPSS) that we will be using for the labs. Citrix essentially allows access to the CSBS virtual lab.

Exams (60%): Each exam is worth 20% of the grade. The first exam is due **June 5th**, the second on **July 10th**, and the third exam is due on **August 4th**. Each exam must be turned in by 11:59pm on the date they are due (always a Monday). The exams are online and timed (2.5 hours each) but will be available for one week. Once the exam begins you must complete the exam in one session.

Extra Credit: Two extra credit options will be available, each worth one homework assignment.

Grading Scale

94-100%: A	87-89%: B+	77-79%: C+	67-69%: D+	<60%: F
90-93%: A-	83-86%: B	73-76%: C	63-66%: D	
	80-82%: B-	70-72%: C-	60-62%: D-	

Grades will not be curved.

Schedule

See the table on the next page.

Note: The syllabus is subject to change. Proper notice will be made in advance on Canvas if any changes occur. Students are responsible for staying updated on Canvas announcements or emails.

Course Schedule

Date	Topic	Readings	Lab/Exam	Homework
Section 1: Descriptive Statistics				
08/21 - 08/28	The What & Why of Statistics	Ch. 1		Assignment 1
08/28 - 09/04	Frequency Distribution	Ch. 2	Set-up Citrix	Assignment 2
09/04 - 09/11	Measures of Central Tendency	Ch. 4		Assignment 3
09/11 - 09/18	Measures of Variability	Ch. 5	Lab 1	Assignment 4
09/18 - 09/25	<i>Exam 1</i>			
Section 2: Inferential Statistics				
09/25 - 10/02	Normal Distribution	Ch. 6		Assignment 5
10/02 - 10/09	Sampling and Sampling Distribution	Ch. 7		Assignment 6
10/08 - 10/16 (Fall Break)	Estimation	Ch. 8	Lab 2	
10/16 - 10/23	Testing Hypotheses	Ch. 9	Lab 3	Assignment 7
10/23 - 10/30	Bivariate Tables/Cross-tabulation	Ch. 10		Assignment 8
10/30 - 11/06	Chi-square Test	Ch. 11 (p. 247-363) & Onchiri (2013)	Lab 4	Assignment 9
11/06 - 11/13	<i>Exam 2</i>			
Section 3: Relationships Between Variables				
11/13 - 11/20	Measures of Association for Nominal and Ordinal Variables	Ch. 11 (p. 363-375)		Assignment 10
11/20 - 11/27	Analysis of Variance (ANOVA)	Ch. 12		Assignment 11
11/27 - 12/04	Bivariate Correlation & Regression	Ch. 13	Lab 5	Assignment 12
12/04 - 12/11	<i>Exam 3</i>			