

# Sociology 3120 Social Statistics

Eric N. Reither, Ph.D.  
Utah State University, Spring Semester 2016  
Tuesday and Thursday, 9:00-10:15 a.m.  
Old Main 119

## Contact Information:

Phone Number: Office 435-797-1217

Office Location: 224L Old Main, Sociology Department

Office Hours: Tuesdays 1:00-2:00 p.m. and Wednesdays 9:00-10:00 a.m.

e-mail: eric.reither@usu.edu

## Overview:

This course in Social Statistics will provide you with an introduction to quantitative methods of reasoning in Sociology and other social sciences. People sometimes equate statistics with complex mathematical formulas and question the relevance of learning these formulas as part of their educational experience. Although the mathematical underpinnings of statistics are an important subject in their own right, they are not the focus of this course.

Rather, through this course you will learn that statistics are an indispensable set of tools that can help you answer questions about the social world. In my experience, the application of various statistical techniques has led to several fascinating and unanticipated discoveries. In addition to the joy of discovery, training in statistics is also highly pragmatic, as it provides you with a skillset that is valued by many graduate programs and employers in academia, government, and the private sector.

In this course, you will learn some basic formulas and perform various calculations by hand to solidify your foundation of knowledge in statistics. But since researchers in the “real world” make use of cutting edge computer technologies to ease the calculation of statistics, you will also receive an introduction to these technologies by completing exercises with the Statistical Package for the Social Sciences (SPSS). A basic understanding of statistics coupled with the ability to use software like SPSS can be a formidable combination in a competitive job market.

## Course Objectives

By taking this course, you will:

1. Gain factual knowledge about statistics (e.g., terminology and formulas);
2. Learn fundamental principles in statistics (e.g., central limit theorem);
3. Develop specific skills and competencies needed by sociologists and other social scientists;
4. Analyze and critically evaluate ideas, arguments, and points of view.

## REQUIRED TEXTBOOK, ADDITIONAL READINGS AND SUPPLIES

### Required Textbook

Healey, Joseph F. 2005. *Statistics: A Tool for Social Research*. Seventh Edition. Wadsworth: Belmont, CA.

Note that I have placed several copies of this text on reserve in the library. Used copies may also be purchased through the bookstore or several online vendors. You may access the text however you like, but **please be certain that you are using the *seventh* edition.**

### Supplies

You will need a USB drive to store small databases. You will also need a basic scientific calculator. If you do not have these items already, they are inexpensive and can be acquired at the USU bookstore.

## ADDITIONAL ASSISTANCE AND SPECIAL NEEDS

Those of you who anticipate or experience difficulties with the course are encouraged to contact me for additional assistance. Students with disabilities may qualify for reasonable accommodations to ensure equal participation in the class. If a student has a disability that will likely require some accommodation by the instructor, the student must contact the instructor and document the disability through the Disability Resource Center (797-2444), preferably during the first week of the course. Any request for special consideration relating to attendance, pedagogy, taking of examinations, etc., must be discussed with and approved by the instructor. In cooperation with the Disability Resource Center, course materials can be provided in alternative format, large print, audio, diskette, or Braille.

## ACADEMIC INTEGRITY

Each student has the right and duty to pursue his or her academic experience free of dishonesty. The Honor System is designed to establish the higher level of conduct expected and required of all Utah State University students. The Honor Pledge states "I pledge, on my honor, to conduct myself with the foremost level of academic integrity." Students adhering to the pledge espouse academic integrity as an underlying and essential principle of the Utah State University community, understand that each act of academic dishonesty devalues every degree that is awarded by this institution, and are welcomed and valued members of Utah State University. All students who take this course must sign a contract that binds them to the Honor Pledge and high standards of classroom decorum.

Students who live by the Honor Pledge do not cheat, falsify, or plagiarize. Plagiarism includes knowingly representing, by paraphrase or direct quotation, the published or unpublished work of another person as one's own in any academic exercise or activity without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials. The penalties for plagiarism are severe. They include warning or reprimand, grade adjustment, probation, suspension, expulsion, withholding of transcripts, and denial or revocation of degrees.

## GRIEVANCE PROCESS

Students who feel they have been unfairly treated [in matters other than (i) discipline or (ii) admission, residency, employment, traffic, and parking - which are addressed by procedures separate and independent from the Student Code] may file a grievance through the channels and procedures described in the Student Code: <http://www.usu.edu/student-services/pdf/StudentCode.pdf#Article7> (Article VII. Grievances, pages 25-30).

## EVALUATION AND GRADING POLICY

Three scheduled exams, ten assignments and a series of in-class quizzes are the basis for performance evaluation. There will be two exams during the semester and one during finals week. The final exam will be comprehensive. Grades for exam essays and any assignment involving writing will be awarded based your understanding and evaluation of statistical concepts and issues, the logic and strength of your arguments, the clarity and organization of your writing, and the care taken in avoiding common spelling and grammatical errors.

On average, there will be about one quiz and one scheduled assignment per week. Quizzes are designed to gauge how well you are keeping up with and comprehending course readings and lecture materials; hence quizzes are not announced ahead of time. Assignments provide you with opportunities to solve statistics problems, both by hand and also using SPSS software. Both quizzes and problem sets afford you with excellent practice opportunities for the exams. Although the amount of time required to complete assignments varies by week and by student, you should plan to devote several hours each week to homework problems related to this course.

**You must complete assignments and exams on time.** If an illness or other unforeseen event causes you to miss an exam or problem set deadline, you must contact me immediately to request a deadline extension or make-up exam. In the case of illness, a note from your physician may be required.

In most circumstances, tardy work is penalized 10% for each day that it is late. To illustrate, an assignment worth 10 points that is handed in 3 days late will be subject to a deduction of 3 points.

Your grade will be determined via the following scale:

(1) Assignments	100 points	A = 460-500 points (92-100%)
(2) Quizzes	150 points	A- = 450-459 points (90-91.9%)
(3) Exam 1	75 points	B+ = 435-449 points (87-89.9%)
(4) Exam 2	75 points	B = 410-434 points (82-86.9%)
(5) Final Exam	100 points	B- = 400-409 points (80-81.9%)
Total Points	= 500 points	C+ = 385-399 points (77-79.9%)
		C = 360-384 points (72-76.9%)
		C- = 350-359 points (70-71.9%)
		D+ = 335-349 points (67-69.9%)
		D = 300-334 points (60-66.9%)
		F = 0-299 points (0% to 59.9%)

## ATTENDANCE POLICY

**You are expected to attend every class.** I also expect you to come to class on time and to stay for the duration of class. Regular class attendance is vital to your success in this course. Knowledge in statistics is sequential. If you fail to grasp concepts early on in the course due to poor attendance, you will likely struggle with the more complicated concepts that come later in the course.

Class participation strongly influences your final grade through a series of pop quizzes. Each quiz is worth 15 points; 7 of those 15 points are guaranteed to students who are in attendance. I will award the remaining 8 quiz points based on your understanding of recent course readings and lecture materials. Please note that quizzes cannot be retaken if missed. However, you are allowed to drop your four lowest quiz grades, protecting you from penalty in the event that you miss class for legitimate reasons.

If you have any questions regarding the course objectives, required readings and materials, or course policies previously outlined, please do not hesitate to contact me. I am happy to provide clarification.

## PERSONAL TECHNOLOGY POLICY

Cell phones, handheld game systems, iPods, tablets, laptop computers, etc., are not permitted in this course. If you have special needs that require the use of a personal technology device, please see me.

## EXTRA CREDIT

Extra credit is not available in this course. If you have concerns about your grade, please contact me.

## COURSE SYLLABUS

*You are expected to complete all readings by the adjacent date.* All listed readings are from the seventh edition of *Statistics: A Tool for Social Research* (Healey 2005). Supplementary readings and the exact nature of assignments are not provided in this syllabus.

### *Week One: Introduction to Social Statistics*

January 12      Readings: None (first day of class)

January 14      Readings: Chapter 1 (all)

### *Week Two: Descriptive Statistics, Part I*

January 19      Readings: Chapter 2, pp. 24-41  
Problem set 1 assigned

January 21      Readings: Chapter 2, pp. 41-56

*Week Three: Descriptive Statistics, Part II*

January 26      Readings: Chapter 3 (all)  
                    Problem set 1 due  
                    Problem set 2 assigned

January 28      Readings: Chapter 4, pp. 95-105

*Week Four: Descriptive Statistics, Part III*

February 2      Readings: Chapter 4, pp. 105-114  
                    Problem set 2 due  
                    Problem set 3 assigned

February 4      Readings: Chapter 5 (all)

*Week Five: Exam 1 and Inferential Statistics, Part I*

February 9      Problem set 3 due  
                    Review for Exam 1

February 11     Exam 1

*Week Six: Inferential Statistics, Part II*

February 16     No class – USU follows Monday class schedule today

February 18     Readings: Chapter 6 (all)

*Week Seven: Inferential Statistics, Part III*

February 23     Readings: Chapter 7, pp. 165-175  
                    Problem set 4 assigned

February 25     Readings: Chapter 7, pp. 175-186

*Week Eight: Inferential Statistics, Part IV*

March 1          Readings: Chapter 8 (all)  
                    Problem set 4 due  
                    Problem set 5 assigned

March 3          Readings: Chapter 9, pp. 223-231

*Week Nine: Spring Break (March 7-11)*

*Week Ten: Inferential Statistics, Part V*

March 15      Readings: Chapter 9, pp. 231-241  
                  Problem set 5 due

March 17      Readings: Chapter 10 (all)  
                  Problem set 6 assigned

*Week Eleven: Inferential Statistics, Part V (continued) and Exam 2*

March 22      Readings: Chapter 11, pp. 291-302

March 24      Readings: Chapter 11, pp. 280-291  
                  Problem set 6 due  
                  Review for Exam 2

*Week Twelve: Bivariate Measures of Association, Part I*

March 29      Exam 2

March 31      Chapter 12 (all)  
                  Problem set 7 assigned

*Week Thirteen: Bivariate Measures of Association, Part II*

April 5        Chapter 13 (all)

April 7        Readings: Chapter 14, pp. 361-369

*Week Fourteen: Bivariate Measures of Association, Part III*

April 12      Readings: Chapter 14, pp. 369-383  
                  Problem set 7 due  
                  Problem set 8 assigned

April 14      Readings: Chapter 15 (all)

*Week Fifteen: Bivariate Measures of Association, Part IV*

April 19      Readings: Chapter 16 (all)

April 21      Problem set 8 due  
                  Problem sets 9 and 10 assigned

*Week Sixteen: Basic Multivariate Techniques; Final Exam Review*

April 26      No new readings or assignments

April 28      Review for Final Exam  
                  Problem sets 9 and 10 due

The final exam for this class is Tuesday, May 3 from 9:30-11:20 a.m.

## Course Contract

I affirm that I have read the entire syllabus for Sociology 3120, *Social Statistics*, taught by Dr. Eric N. Reither at Utah State University in the Spring semester of 2016. I affirm that I understand the policies set forth in this syllabus. I agree to comply with these policies and understand that noncompliance may result in academic sanction.

Furthermore, I affirm that I have read the expectations for academic integrity among students at USU as set forth in *The Code of Policies and Procedures for Students at Utah State University* (<http://www.usu.edu/studentservices/studentcode/article6.cfm>). I affirm that I understand the expectations set forth in this document. I agree to comply with these expectations and understand that noncompliance may result in academic sanction and/or disciplinary action. In particular, I agree to (1) show respect for other students, the instructor and the classroom environment and (2) uphold the high standards for academic integrity that are summarized in the Honor Pledge.

“I pledge, on my honor, to conduct myself with the foremost level of academic integrity.”

\_\_\_\_\_ (print full name)

\_\_\_\_\_ (signature and date)