# INTRODUCTION TO SOCIAL STATISTICS

SOC 3112-090, Summer 2014, 04 Credits

Class meets online from June 19th to July 30th, 2014



Photo credit: http://imgs.xkcd.com/comics

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Office Hours: By appointment

# **Course Overview**

#### **Course Summary**

This course fulfills the Quantitative Reasoning (QB) and Quantitative Intensive (QI) requirement of the University of Utah. Basic algebra knowledge is required.

This course introduces you to the world of empirical research for social sciences. It aims at providing you the abilities to calculate and interpret statistics in social context. Strong quantitative skills will assist you not only in academic success but also in your daily activities.

There will be three sections in this class. First, we will start with descriptive statistics, namely frequency distribution, measures of central tendency and variability. Second, we will move on to basic inferential statistics like t-test or ANOVA and drawing conclusion about the population. Finally, we will learn how to describe relationship between variables, including measure of association, correlation and bivariate regression.

## **Course Objectives**

By the end of this course, you will be able to:

- Calculate descriptive statistics
- Calculate inferential statistics
- Measure relationship between variables
- Interpret statistics within the context of social sciences

## **Required Text and Material**

- Frankfort-Nachmias, C. and A. Leon-Guerrero. 2014. *Social Statistic for a Diverse Society*. 7<sup>th</sup> Edition. Sage Publications. (6<sup>th</sup> Edition should be fine)
- Calculator (with square-root function)

# **Teaching and Learning Methods**

- This course will be online which means we will not meet in class. Since the content of this class is *very intense and compressed*, I expect you to cover the reading assignments, and do your homework so that exams will not be too hard for you.
- All the teaching materials will be available on your canvas. We will communicate mainly and regularly on canvas. Be sure to check your canvas frequently for class announcement and update.

## Policies

- *Late work:* No late work or make up exam accepted unless you let me know beforehand. Once you pass any due date your homework and exams will be automatically locked.
- *Reading assignment:* You will find much of the material covered in this course *overwhelming*. Reading the text along with doing your homework will help you better prepare for your exams.
- *Assistance:* If you have any question or request, please email me or send me a message on canvas. I will reply in a timely manner.
- *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: <a href="http://www.admin.utah.edu/ppmanual/8/8-10.html">http://www.admin.utah.edu/ppmanual/8/8-10.html</a>. 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.
- *Academic Misconduct:* 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." Please refer to the Student Code for full elaboration of student academic and behavioral misconduct policies (http://regulations.utah.edu/academics/6-400.php).

## **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 (CDS), 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to the CDS.

#### 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 - <u>www.wellness.utah.edu</u>; or 801-581-7776.

#### Assessments

#### Homework (10 points each): 40% total

There will be a total of <u>seven assignments</u> under Quizzes on canvas. Homework will be a few questions at the end of each chapter in form of quizzes similar to the online exams. There will be two attempts for each homework. Please check the tentative schedule below or your canvas calendar for deadlines.

#### Online Exams (50 points each): 60% total

There will be <u>two online exams</u> under Quizzes on canvas. Each exam will be <u>two hours</u> long and will cover all chapters. You have <u>one attempt</u> to complete your exam. You are expected to complete your exam during the period listed below in the schedule rubric. There will be <u>no handwritten test</u> which means <u>no Testing Center and Proctor needed</u>. All you need is a <u>computer connected to internet</u>.

<u>No makeup exam</u> is allowed except it is a <u>medical condition</u> (with proof). If you, unfortunately, have any health-related problem and could not take the test, <u>contact me as soon as possible</u> for online exam extension. If you fail to communicate on this matter, no makeup exam will be offered. I am willing to help if you let me know your health condition before the exam goes "expired" (automatically locked after due date) on canvas and the answer is posted.

#### Grading Scale: Grades will not be curved

90-100%: A	80-89%: B	70-79%: C	60-69%: D	0-59%: E

# **Tentative Schedule**

Week	Content	Reading (Read for this week)	Homework & Exam (Due at the end of this week)
Jun 19-21	The What & Why of Statistics	Chapter 1	HW #1
	Frequency Distribution	Chapter 2	
June 22-28	Measure of Central Tendency	Chapter 4	HW #2
	Measure of Variability	Chapter 5	
Jun 29-July 5	Normal Distribution	Chapter 6	HW #3
	Sampling and Sampling Distribution	Chapter 7	
Jul 6-12	Estimation	Chapter 8	HW #4
	Testing Hypotheses	Chapter 9	Exam #1
Jul 13-19	Chi-square Test	Chapter 11	HW #5
	Analysis of Variance (ANOVA)	Chapter 14	
Jul 20-26	Cross-Tabulation	Chapter 10	HW #6
	Measures of Association for Nominal and Ordinal Variables	Chapter 12	
Jul 27-30	Bivariate Correlation & Regression	Chapter 13	HW #7
			Exam #2

*Revised on February*, 25<sup>th</sup>, 2014