

Syllabus

Sociology 3112 Social Statistics, Section 010
Spring 2009
University of Utah
Thursday 6:00-8:45 PM
BEH S 102

Instructor: Yong Cai
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Office hours: Thursday 5:00-6:00pm or by appointment
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<http://www.soc.utah.edu/courses/soc3112> (lab)

Course Description and Objectives

This course teaches basic statistical concepts and techniques in the context of social science research. The class has two major parts. The first part focuses on descriptive statistics, mainly on how to describe data with summary measures, such as mean, median, variance and correlation, or with informative presentation/analysis techniques, such as frequency table, cross-tabulation, graphics and regression. The second part of the class covers the basics of statistical inference, i.e. how to draw conclusion about population based on samples, including normal distribution and sampling theory, point estimate, confidence interval, hypothesis testing and ANOVA. The goal is that students will learn how to construct and interpret descriptive statistics and how to make statistical inferences.

Course Materials: Textbooks/Calculator

Frankfort-Nachmias and Leon-Guerrero's *Social Statistics for a Diverse Society* is the main text for the class. Kentor's *Exploring Social Inequality with Statistics* will be used as the lab manual. Both of them are available for purchase at the University Bookstore.

Frankfort-Nachmias, C. and A. Leon-Guerrero. 2006/2009. *Social Statistics for a Diverse Society*, 4th or 5th edition. Thousand Oaks, California: Pine Forge Press.

Kentor, Jeffery. 2004. *Exploring Social Inequality with Statistics*. Thomson Custom Publishing.

Students need a calculator that can do basic calculations as well as logs and exponents. Please bring your calculators to every class for in-class exercises, and for periodic in-class quizzes.

Course Requirements and Grading

Final grades will be calculated as a weighted average of quizzes (15 percent), exams (60 percent), homework assignments (10 percent), and lab performance (15 percent).

There will be a total of 3 exams. Official dates will be announced one week before the exams. Prior approval is necessary to miss an exam and will only be given in extreme circumstances. Exams are structured to increase in value as the class progresses in order to take into account improvements in student performance over time. There will be no make-up exams.

Class attendance is important for success in this course. To encourage class attendance, there will be several unannounced quizzes during the semester. No makeup quiz will be given, but I will drop your lowest quiz grade. You will receive no credit for taking quizzes or exams from the section in which you are not officially enrolled.

Homework for each chapter will be announced in class and will be due in one week after it is announced. No late homework will be accepted, although you may miss one homework assignment without penalty.

This course has a lab component. The lab is designed for you to practice statistical analysis using a computer. You will learn the mechanics of using SPSS to solve problems related to topics covered in the class. In your first class you will be required to sign up for ONE hour of lab time per week: Mon or Wed 10:45 AM -11:30 AM, Tues or Thurs 7:30 am - 8:50 am, or Thurs evenings 5:00 pm - 6:00 pm. All labs meet in BEH S 101. All labs meet in BEH S 101. Your teaching assistants will conduct lab sessions.

Tentative Course Schedule (*subject to change*)

Week 1	Introduction Chapter 1: The What and Why of Statistics Chapter 2: Organization of Information
Week 2	Chapter 3: Graphic Presentation Chapter 4: Measures of Central Tendency
Week 3	Chapter 4: Measures of Central Tendency Chapter 5: Measures of Variability Review
Week 4	Exam #1
Week 5	Chapter 6: The Normal Distribution
Week 6	Chapter 7: Sampling and Sampling Distribution
Week 7	Chapter 8: Estimation
Week 8	Chapter 9: Testing Hypothesis
Week 9	Exam #2
Week 10	Chapter 10: Relationship between Two Variables: Cross-Tabulation
Week 11	Chapter 11: The Chi-sq Test
Week 12	Chapter 12: Measures of Association for Nominal and Ordinal Variables
Week 13	Chapter 13: Regression and Correlation
Week 14	Chapter 14: Analysis of Variance
Week 15	Exam #3

Americans with Disabilities Act (ADA)

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 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations.

All written information in this course can be made available in alternative format with prior notification to the Center for Disability Services.