Social Statistics Sociology 3600

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Office Hours: weekdays 10:00 a.m. to noon, or by appointment

COURSE OBJECTIVES

Statistics is used in the social and behavioral sciences to describe the human condition and to deal with policy questions involving social problems and theoretical questions about human nature. Properly used, it can help us get a handle on the apparent complexity of human activity; when misused it can mislead our attempts to deal with the problems we perceive. To avoid being misled by statistical applications, we need a grounding in the fundamental principles, common to all statistical techniques, and applicable to a wide range of problem areas. We will attempt to focus on those fundamental principles and how they operate in a variety of contexts.

The course will be divided into two basic sections: descriptive statistics and inferential statistics. The first deals with the techniques we use to summarize information in ways that can be readily understood, convey meaning and allow comparisons that can address questions we are interested in. The second deals with questions of the generalizability of descriptions and the probabilities of various arrangements of observations given specific assumptions about the ways information is gathered and states of nature that might exist.

This course will emphasize the uses and interpretation of statistics as well as their computation. If you can compute a statistic, but don't know what it means in terms of your research and data set, you might as well not have bothered to compute the statistic. A familiarity with algebra and algebraic notation is expected. **Math competency is a prerequisite for this course.**

STUDENT LEARNING OBJECTIVES

- Students will be able to compute, and use SPSS to compute basic descriptive statistics.
- Students will be able to analyze and interpret descriptive statistics.
- Students will be able to compute, and use SPSS to compute basic inferential statistics.
- Students will be able to analyze and interpret basic inferential statistics.
- Students will be able to write hypotheses and analyze them and make decisions about their significance.

TEXTS

Required:

Leon-Guerrero, Anna and Chava Frankfort-Nachmias. 2012. *Essentials of Social Statistics for a Diverse Society*. Los Angeles: Sage.

The computer statistical package that we will be using in this course is

B: <u>Assignments:</u> There will be ten graded assignments given involving hand and calculator computation and also the use of the computer. Each assignment will contain several problems related to the topics recently covered in class. Assignments will involve entering data into the computer, making computer runs, and interpreting the results, as well as computing statistical formulas by hand. A handout will be provided which will specify what is expected for that particular assignment. Assignments are due at the beginning of the scheduled class period in the classroom noted on the class schedule or by 6 PM on non-class days. Computer printouts of the results of runs must be turned in with the interpretation of results. THE INTERPRETATION SECTION OF THE ASSIGNMENTS MUST BE TYPED. Late assignments, i.e., any assignment that I don't receive by the appropriate time will be accepted, but **5 percent** will be deducted each day (INCLUDING WEEKENDS) past the deadline. Additionally, there are also exercises /problems in each of the chapters of the book(s), which you can do on your own to increase your understanding of concepts and techniques.

ACADEMIC INTEGRITY

In addition to, but not instead of, assigned readings, you may wish to consult other sources (including discussing assignments with other students). This is acceptable, but is not required. However, in all instances, you must do your own work and **credit must be given where credit is due**. There is no excuse for plagiarism -- submitting another's work, ideas, or wording, as your own. If you plagiarize, or otherwise cheat, on any assignment or exam you will receive a failing grade for the course, and your name will be forwarded to the Dean of Students. Any student who does not understand how to avoid plagiarism must request assistance form the instructor.

GRADING

Grades will be assigned on the following basis:

Exams: 300 points

<u>Assignments:</u> 300 points

Total points: 600 points

95% = A 87% = B+

SCHEDULE

WEEK DATES TOPIC

READINGS ASSIGN. & EXAMS