

Southern Illinois University Carbondale  
**SOCIOLOGY 308-01**  
**Statistics for Social Science**  
Spring 2010

**Instructor:** Miss Kristie Lipford

**Email:** [klipford@siu.edu](mailto:klipford@siu.edu) Please include "soc308" in the subject of all emails sent.

**Office:** Faner Hall 3427

**Office Hours:** TR 11am-2pm

**Sociology Office Phone:** 618-453-7624

**Meeting Times:**

Lecture: 9:00 – 10:40 TR

Location: Comm. 1018

**Course Overview:**

Statistics is the study of numerical data. Data interpretation, via statistics, greatly influences things like voting choice, social policy, and the top 10 video countdown. Our world, now more than ever, is shaped by statistics. Statistical literacy is the ability to understand and make sense of quantitative data. This class will help you to become statistically literate by introducing you to basic principles of stat concepts and analyses. The first part of the course will cover descriptive statistics which allows you to describe the data with measures of central tendency and variability. The second part of the course will include more inferential statistics where you will learn techniques to draw conclusions about populations (Central Limit Theorem, ANOVA, correlation, etc). To aid in your understanding, you will be required to manually calculate stat problems and analyze problems using statistics software (SPSS).

**Required Text:**

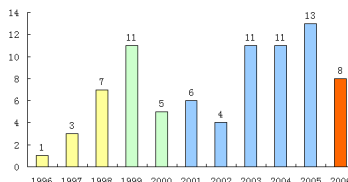
Levin, Jack and James Alan Fox. *Elementary Statistics in Social Research: The Essentials 2<sup>nd</sup>* edition. Boston, MA: Pearson Education.

**General Policies:**

1. Attendance - **Regular class attendance is expected and necessary.** Students should refer to their student handbook for university attendance policies and respond accordingly.

**Reasonable Accommodations:**

Students requiring special accommodations should alert me within the first two weeks of school. In addition, I highly suggest that you contact SIUC's Disability Support Services (**DSS**) or **The Achieve Program** in order to take advantage of the programs they offer (DSS Office: 618-453-5738).



## Course Requirements

### 1. Exams

There will be **2 exams**, a midterm and a final, worth 50 points each. Exams will be comprehensive, but no worries because your homework and quizzes will provide a strong foundation to perform well on the tests.

### 2. Quizzes

Quiz, in this sense, is an umbrella term that describes an array of class assignments. Quizzes may be classwork, class notes, group work, analyses, data interpretation, or *actual quizzes*. You will have **10 quizzes** worth 20 points each.

### 3. Homework

Homework is a great way to review and practice what you've learned so far. There are **10 homework assignments** worth 10 points each. It behooves you to complete homework assignments! Also, "not knowing" is not a good excuse for not doing the assignment, so if you have any questions concerning homework make time to ask. Again, my office hours are Tuesday and Thursday 11-2pm.

### Grading Distribution:

Grades will be determined by an accumulation of points, with a **perfect score being a total of 400 points**. As aforementioned, there will be (1) two exams worth 50 points each, (2) 10 quizzes worth 20 points each, and (3) 10 homework assignments worth 100 points.

**A= 360 and up**

**B= 320 - 359**

**C= 280 - 319**

**D= 240 - 279**

**F= 239 and below**

### \*Extra Credit

Every now and then I will assign \*bonus assignments\*. The amount of points you receive on the assignment depends on the quality of the work. Bonus assignments are worth up to +5 points each. **Please do not ask me to make up quizzes or homework**. If you miss a quiz, for example, you should take advantage of the next \*bonus assignment\* to make up your missing grade.

### Tentative Course Schedule

**Week One:** Jan.19 – Jan.21

- Topics: social research and levels of measurement
- Chapter 1 - *Why the Social Researcher uses Statistics*

**Week Two:** Jan.26 – Jan.28

- Topics: frequency and percentage distributions
- Chapter 2 – *Organizing the Data*

**Week Three:** Feb.2 – Feb.4

- Topics: mean, median, mode
- Chapter 3 – *Measures of Central Tendency*

**Week Four:** Feb.9 – Feb.11

- Topics: variance, standard deviations, sum of squares
- Chapter 4 – *Measures of Variability*

**Week Five:** Feb.16 – Feb.18

- Topics: chapter 1-4 summary

**Week Six:** Feb.23 – Feb.25

- Topics: z-scores, probability, bell curve
- Chapter 5 – *Probability and the Normal Curve*

**Week Seven:** March 2 – March 4

- Topics: sampling, standard error, levels of confidence
- Chapter 6 – *Samples and Populations*

### **Spring Break March 6 – March 14**

**Week Eight:** March 16 – March 18

- Topics: chapter 5-6 summary
- **Exam I – Midterm 18 March 2010 Thursday**

**Week Nine:** March 23 – March 25

- Topics: null hypothesis
- Chapter 7 – *Testing Differences between Means*

**Week Ten:** March 30 – April 1

- Topics: ANOVA, f ratio
- Chapter 8 – *Analysis of Variance*

**Week Eleven:** April 6 – April 8

- Topics: chi-square
- Chapter 9 – *Nonparametric Tests of Significance*

**Week Twelve:** April 13 – April 15

- Topics: chapter 7-9 summary

**Week Thirteen:** April 20 – April 22

- Topics: correlation coefficients and curvilinear associations
- Chapter 10 - *Correlation* and Chapter 11 - *Regression*

**Week Fourteen:** April 27 – April 29

- Topics: continue chapter 10-11 topics

**Week Fifteen:** May 4 – May 6

- Topics: evaluations and final exam preparation

**Week Sixteen: Final Exam**

- **Exam II Thursday 13 May 2010**
- **7:50am - 9:50am**

\*Please note that the instructor reserves the right to make any changes and amendments to the syllabus.

## **Emergency Procedures!!**

Southern Illinois University Carbondale is committed to providing a safe and healthy environment for study and work. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the SIUC Emergency Response Plan and Building Emergency Response Team (BERT) program. Emergency response information is available on posters in buildings on campus, available on the BERT'S website at [www.bert.siu.edu](http://www.bert.siu.edu), Department of Public Safety's website [www.dps.siu.edu](http://www.dps.siu.edu) (disaster drop down) and in the Emergency Response Guideline pamphlet. Know how to respond to each type of emergency.

Instructors will provide guidance and direction to students in the classroom in the event of an emergency affecting your location. It is important that you follow these instructions and stay with your instructor during an evacuation or sheltering emergency. The Building Emergency Response Team will provide assistance to your instructor in evacuating the building or sheltering within the facility.