

Introduction to Statistical Analysis
Sociology 2201 – Section 5
Fall 2002

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Office Hours: Monday 2:00 - 3:00pm
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Classroom: 116 Stubbs Hall
Computer Lab: 102 Stubbs Hall

Final Exam: Monday, December 9, 2002: 8:00 to 10:00 pm (in Stubbs 116)

Course Description:

Welcome to SOCL 2201, a.k.a “stats”. Most likely, you enrolled in this course because “stats” is required for your major. Why do LSU degree programs require stats? Probably because statistics are increasingly present in many areas of life (Education--GPA, SAT scores, Number of EC activities; Work, gross salary, net salary, sales, efficiency; Health--calories per serving, cholesteral level, APGAR scoring; and the list could go on and on). University officials probably figure it is necessary for students in certain majors to have at least a basic knowledge of “stats”.

The full word, statistics, has three meanings. First, “stats” can refer to the summary numbers that summarize a set of data. One simple example is the class average; it summarizes the scores of all students into one summary score, the mean.

Second, “stats” can also refer to the methods of calculating summary numbers. Some people call this number crunching, I guess this means “crunching” a set of numbers into one summary number. For example, to calculate the class average I add up all the grades and divide by the number of students—a rather simple process, right? But what if 2 or 3 students never came to class and never officially withdrew, and received scores of 0, do I include the zeros or remove them? This is a “methods” issue, and we will discuss these and similar issues in “stats”.

Third, “stats” can also refer to the interpretation of summary numbers. We will learn many statistics that describe single variables or relationships between variables. In addition to calculating these statistics (number crunching), we will also learn how to interpret what these numbers tell us about a variable or a relationship.

Most of you are required to earn a C or higher in “stats”. It is not difficult to earn a C in my course, if you (1) attend all classes, (2) read the book, (3) do the homework, (4) study for exams and weekly quizzes, and (5) seek assistance early in the semester if needed. I encourage students to come to me for assistance if needed (e-mail mschaf1@lsu.edu, office phone 8-5357, home phone 767-7751).

Required Text: William Fox. *Social Statistics: A Text Using Microcase and A Microcase Workbook for Social Statistics*. 2003. Includes text, workbook, Microcase CD-ROM and diskette.

Buy this book set new.

Students may also borrow other from me texts for additional explanations and practice problems.

Grading Policy: Three exams, weekly quizzes, and homework

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| • First Exam | 30% | Chapters 1 to 3 |
| • Second Exam | 30% | Chapters 4 to 6 |
| • Third Exam | 30% | Chapters 7 to 9 |
| • Fourth Exam | 30% | Chapters 10 to 12 |
| • Participation | 10% | (Includes HW, Quizzes, and Attendance) |

-One exam will be dropped

More details:

- Exams cover all concepts and applications of statistics discussed in lecture, in textbook, in homework assignments, and in lab work
- Each week we will go over assigned HW and give concept quizzes.
- There will be no make-up exams. If you miss one, you will have to drop it.
- I will not give a grade of incomplete in the course.
- I reserve right to change grading policy.

Attendance Policy: Attendance IS REQUIRED. I expect students to attend all classes. If you do not intend to come to all the classes **I strongly recommend dropping the course now.**

Academic Dishonesty: I take any plagiarism, cheating, copying, and other forms of academic dishonesty very seriously. Take full responsibility and complete your own work. I will report any instances of dishonest behavior to the Dean of Students.

Semester Book: I use Semester Book, available through PAWS. The course syllabus, powerpoint lecture notes, and other materials will be available through Semester Book. I will also use it to post grades and send e-mails. Point: you really need to have a PAWS account and use Semester Book!

Bring the following materials every Monday:

1. Both Texts
2. Microcase disk and CD Rom
3. A calculator

Tentative Schedule of Topics and Assignments (may change)

PART ONE: UNIVARIATE ANALYSIS: ONE VARIABLE

Week 1	Aug 26:	Chapter 1: Intro and Basic Concepts
Week 2	Sep 2:	Labor Day: No Class
<i>Univariate Statistics</i>		
Week 3	Sep 9:	Chapter 2: Distributions
Week 4	Sep 16:	Chapter 3: Averages
Week 5	Sep 23:	Chapter 4: Variation
Week 6	Sep 30:	First Exam and Chapter 5: Bivariate Cross-Tabulation
Week 7	Oct 7:	Chapter 6: Chi-Square test of Statistical Significance
Week 8	Oct 14:	Chapter 7: Measures of Association Part I
Week 9	Oct 21:	Second Exam and Measures of Association Part II
Week 10	Oct 28:	Chapter 8: Comparison of Means, t-Test
Week 11	Nov 4:	Chapter 9: Analysis of Variance
Week 12	Nov 11:	Third Exam and Chapter 10: Bivariate Regression and Correlation
Week 13	Nov 18:	Chapter 11: Multivariate Cross-Tabulation
Week 14	Nov 25:	Chapter 12: Multiple Regression and Correlation
Week 15	Dec 2:	Review
Week 16	Dec 9:	Final Exam (8:00 - 10:00pm, in Stubbs 116)
Final Exam: Monday May 13, 8:00 - 10:00pm, Stubbs Hall 220		