

Statistics for Social Science
SOC 308, Spring 2011, Section 1
4 credit hours

Professor:	Dr. Whaley	Class location:	Parkinson 108
Office:	Faner 3434 (SOC 3384)	Schedule:	M&W 9-10:40
E-mail:	rwhaley@siu.edu	Office Hours:	M&W 1-3, T&Th 1-2 and by appt.
Ofc Phone:	453-7631		
Dept phone:	453-2494		

Overview

This course is required for undergraduate majors. The course will cover the logic, methods, interpretation, and application of statistics in sociology. Students will learn when, why, and how to use various univariate, bivariate, and multivariate statistics and techniques. We will discuss issues of causality, confidence in results, relationships, and more. Students will develop skills by calculating statistics by hand, by conducting analyses with real data using MicroCase software, and by thinking, writing, and discussing statistics and analyses. Students will be required to work in pairs or groups in the classroom and to work independently on homework and exams.

Required Material

1. Social Statistics: A text using MicroCase, 4th edition, **and** A MicroCase Workbook for Social Statistics, 4th edition. William Fox, Wadsworth. \$120 (approx.) One copy of the text will be placed on reserve for use in Morris Library, but you must have a workbook.

BE CAREFUL BUYING USED: The workbook must contain all its pages AND NOT HAVE ANSWERS WRITTEN IN THE EXERCISES.

2. Access to a computer with Windows 95 (or higher), 8MB RAM, CD-ROM drive or 3.5" disk drive. If you will be using a Macintosh, you need to get emulation software or hardware installed immediately (or else plan to use a computer lab and the CD-ROM)

Options:

1. install on your personal hard-drive (you'll have access any time)
2. run from floppy or CD-ROM without installing on hard drive (if you need to work in a computer lab)
3. if cannot install or run from CD, access program from publisher's website – but I believe you have to install the program and so this option will not work in the labs on campus

3. Calculator (preferably a scientific calculator, but at least one that can perform polynomials and square roots).

4. Stapler – all workbook pages must be stapled together when turned in (points will be taken off for repeat offenders)

Course and University Policies

1. Make-up examinations may consist of all essay questions or an alternate set of multiple choice questions and will be given only to students with excused absences and who notified me prior to the examination.

2. **STUDENT CONDUCT CODE:** Southern Illinois University at Carbondale is dedicated not only to learning, research, and the advancement of knowledge, but also to the development of ethically sensitive and responsible persons. The university seeks to achieve these goals through sound educational programs and policies governing individual conduct that encourage independence and maturity. By accepting membership in this university, an individual joins a community characterized by free expression, free inquiry, honesty, respect for others, and participation in constructive change. All rights and responsibilities exercised within this academic environment shall be compatible with these principles. Acts of Academic Dishonesty is a breach of the student conduct code. Dishonest includes: 1. Plagiarism, representing the work of another as one's own work; 2. Preparing work for another that is to be used as that person's own work; 3. Cheating by any method or means; 4. Knowingly and willfully falsifying or manufacturing scientific or educational data and representing the same to be the result of scientific or scholarly experiment or research; 5. Knowingly furnishing false information to a university official relative to academic matters; 6. Soliciting, aiding, abetting, concealing, or attempting conduct in violation of this code. You should consult with me if you are uncertain about an issue of academic honesty prior to the submission of an assignment or test. **FOR OUR PURPOSES: YOU MUST DO YOUR OWN HOMEWORK, INDEPENDENT IN-CLASS WORK, AND YOUR OWN EXAMS WITHOUT CHEATING OF ANY SORT.**

3. **Classroom behavior:** Please be on time, turn off cell phones (unless you are on call then put them on vibrate), and only engage in respectful behavior (e.g., attending on time, listening, contributing, taking notes). The professor reserves the right to report and remove students who continually engage in distracting or disrespectful behaviors.

4. If you have any type of special need(s) or disability for which you require accommodations to promote your learning in this class, please contact me as soon as possible. The office of Disability Support Services (DDS) offers various support services and can help you with special accommodations. You may wish to contact DDS at 453-5738 or go to Room 150 at Woody Hall to verify your eligibility and options.

5. Class discussions should take place within a context of academic inquiry (you are here to learn) and in the spirit of understanding diverse perspectives and experiences. Students should not make negative comments about fellow classmates; demean, devalue or put down people for their differing experiences, backgrounds, and statements; nor show general signs of disrespect for the course, professor or other students. If any student feels attacked, harassed, or otherwise disrespected, for any reason, that student is encouraged to set up a confidential meeting with the professor.

6. **Grades.** It is the student's responsibility to track his/her performance in this course. If for some reason the total available points changes (up or down) due the addition or omission of an assignment, grades will be determined in terms of percentage of the new total possible points.

Total points = 500		
90% or more (450 or more)	=	A
80-89% (400 – 449)	=	B
70-79% (350 – 399)	=	C
60-69% (300 – 349)	=	D
59% or less (299 or less)	=	F

Examples as to how helpful near or perfect attendance can be:

Student A is doing C work on exams but has never missed an in-class activity

Exams: 75, 75, 75, workbook: 80, in-class: 100 = B for final grade

Student B is doing well on exams but has missed most of the in-class activities

Exams: 90, 82, 85, workbook: 90, in-class: 20 = C

Student C is a B student but had perfect attendance and thus had all the activities

Exams: 85, 85, 85, workbook: 85, in-class: 120 = A

Most of the time, the points from in-class will really help but here is a situation where they do not

Student C: exams: 70,70,70, workbook: 75, in-class: 100 = C

But if this student missed a lot of in-class work, the grade is even lower:

Student C: exams: 70,70,70, workbook: 75, in-class: 40 = D

7. Emergency Procedures:

Emergency Procedures. Southern Illinois University Carbondale is committed to providing a safe and health 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 BERT's website at www.bert.siu.edu, Department of Safety's website www.dps.siu.edu (disaster drop down), and in 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.

8. The professor reserves the right to assign additional work of any nature if it becomes apparent that students are not actively engaged in the material or need additional practice. Course grading will be adjusted accordingly. That said, there are NO opportunities for "extra credit"; instead, take advantage of the numerous opportunities for actual credit (that is, complete all in-class activities, attend class, participate, do homework, work hard, and see me if you need help of any sort.)

Student Responsibilities and Requirements

Summary:

Two in-class exams

Exam 1 covering weeks 1-5 on Thursday, February 12 (100 points, 20%)

Exam 2 covering weeks 6-12 on Thursday, April 9 (100 points, 20%)

One combination take-home and in-class final exam

Due May 5th at noon. (100 points, 20%)

Homework exercises: 10 workbook exercises

For maximum of 100 points total (10*10=100 points 20%)

Due on Monday or Wednesday at 9:00 am (see late policy and schedule)

In class work: Attend all classes and complete in-class assignments. Earn up to 100 points, 20% of final grade)

IN CLASS WORK OF ANY SORT CANNOT BE MADE UP. You must be present to earn credit.

Details:

1. Three exams in total: There will be two in-class examinations and one take-home/in-class examination. Question format will range from interpretation/problem solving/computational varieties to true/false, multiple choice and matching types. Exam 3 will involve computer work and a writing task. It will be necessary to “simply memorize” some of the material presented in class, the text, and the workbook and some exam questions will test this type of learning. However, my primary goal is for you to understand the course material and to be able to apply course concepts in various ways. As such, many exam questions will be designed to evaluate your understanding of material and your ability to apply course concepts and ideas rather than simply memorize information. You will be allowed to bring a note card with formulas and other specific information per instructions announced in class. All note cards will be checked on exam day and may be collected. Inappropriate note cards will be taken away prior to the exam and student will take exam without note card.

The examinations will cover specific chapters. However, to understand material in the latter part of the term, you will need to have a sufficient understanding of the material presented earlier in the term. Knowledge is cumulative and in this way, the exams are too.

2. Homework: Complete 10 workbook exercises. Only certain questions will be assigned in each exercise (see syllabus and listen in class for announcements). Due dates are included on the syllabus – though deadlines may be changed as necessary; stay tuned for in-class announcements or Blackboard emails. Because homework will vary in terms of the number of questions, individual questions may be worth different points. Ten points is the maximum score, all points will be summed and will count toward 20% of your final grade.

Sometimes exercises will be graded by another classmate during class and you will grade another classmate’s exercise.

Exercises are due at the beginning of class – 5% of the grade will be removed if an exercise is handed in during class or at the end of class. Each additional day late is another 5% off. DO NOT ask me last minute questions about homework on the day the assignment is due – plan ahead and see me in office hours. NO exercise will be accepted after one week. If for some reason you cannot make it to class on the day the assignment is due, it is your responsibility to get the assignment to me prior to or at the start of the class on which they are due (I have a mailbox in Faner 3384) – at a minimum discuss the situation with me.

3. In-class work: About once a week (more or less), there will be some type of in-class practice activity or extra task related to our work. You will turn in the end-product of the activity; it may be in the form of notes, writing, quizzes, or interpretation/problem solving/computational tasks (often questions in the workbook that are not assigned for homework). In-class work may be individual or may be group. Students may earn 1 to 10 points on each task depending on effort and quality. About 10 points will be assigned to each task, all points will be summed and will count toward 20% of your final grade. Students who are in class for more than 10 activities will be rewarded with extra points depending on quality of work.

You must be present to complete in-class activities and to get credit (in class work cannot be made up – so consistent attendance is critical (if you are absent, you will receive a zero on the in-class work)).

4. Attend all classes and participate in class and group discussions and activities. Come to office hours to discuss any questions, interests, problems with the course material. I am here to help and advise you but I can only do that if you come and see me. Do course reading for day assigned. Check Blackboard email (at least weekly) for announcements, assignments, changes, etc. Track your performance in the course. If class must be canceled for any reason, I will try to alert you via Blackboard email. If the WEATHER is at all questionable (snow/ice storm), please check blackboard.

5. Check Blackboard for email (you can forward blackboard email to your siu account), announcements, and other materials.

Tentative Schedule (subject to change, changes will be announced in class)

<u>Week 1</u> W 1/18	<u>Course Introduction/ Statistics and Variables</u> no reading
<u>Week 2</u> M 1/23	<u>Frequency and Percentage Distributions</u> Read Chapter 1 prior to class In class work with Workbook 1: 1, 2, 3, 5, 7
W 1/25	Workbook 1 (9, 10, 15, 18, 20 a-g, 24, 25) Due Read Chapter 2 prior to class In class work with Workbook 2: 1-5, 6 and 7

- Week 3
M 1/30 Measures of central tendency (e.g., averages)
Read Chapter 3 this week
In class work with Workbook 3: 1, 2
- W 2/1 **Workbook 2 (9, 10, 11a-d, 15-19, 31) Due**
In class work with Workbook 3: 4,7
- Week 4
M 2/6 Measures of variation
Read Chapter 4 this week
Also read on-line article, The median isn't the message by S. J Gould.
[Http://www.cancerguide.org/median_not_msg.html](http://www.cancerguide.org/median_not_msg.html)
In class work with Workbook 4: 1, 3, 9 (SD, variance, sum of squares)
- W 2/8 **Workbook 3 (4, 8, 9a-b, 10, 12, 14) Due**
In class work with Workbook 4: 11, 12 (and other examples)
- Week 5
M 2/13 **Workbook 4 (4, 6, 13, 14, 16-22) Due**
Work with Workbook 4 in class and review for exam
- W 2/15 Exam 1
- Week 6
M 2/20 Cross-tabulation
Read Chapter 5 this week
In class work with Workbook 5 (maybe)
- W 2/22 In class work with Workbook 5
- Week 7
M 2/27 Continued
In class work with Workbook 5
- W 2/29 Chi-square test of significance
Read Chapter 6 for today
Workbook 5 due (2-4, 11, 12, 14) (grade part in class)
Work with Workbook 6
- Week 8
T 3/5 Continue with chi-square
Work with Workbook 6
- W 3/7 **Workbook 6 (1-3, 8, 12-15) due**
Peer grading in groups, discuss different answers
- Break 3/12 to 3/16**
- Week 9 Measures of association for cross-tabulation

M 3/19	Read Chapter 7 this week In class work with Workbook 7 today or Wed. (to be announced)
W 3/21	
<u>Week 10</u>	Multivariate cross-tabulation
M 3/26	Workbook 7 due (1, 2, 7, 8, 10, 11) read Chapter 11
W 3/28	
<u>Week 11</u>	Continued
M 4/2	In class work with Workbook 11 Announcement: revised instructions for Workbook 11: #7, 8, and 10-12
W 4/4	Workbook 11 (2a-b, 3, 10, 11, 12 (for 10-12 need revised instructions)) due
<u>Week 12</u>	
M 4/9	Discuss Workbook 11 and review for exam
W 4/11	Exam 2
<u>Week 13</u>	Comparison of group means (and maybe ANOVA)
M 4/16	Chapter 8 this week, Parts of chapter 9 (to be announced)
W 4/18	Continue, In class work
<u>Week 14</u>	Correlation, bivariate regression, multiple regression
M 4/23	Parts of Workbooks 8 and 9 due (questions to be announced) Read Chapter 10 and parts of Chapter 12 (to be announced) In class work
W 4/25	Continue with regression topics and in class work <u>Final exam assigned (take-home part)</u>
<u>Week 15</u>	
4/30	Continued In class work <i>Student evaluations of professor/course</i>
5/2	Parts of Workbooks 10 and 12 due (discuss/grade in class, stay tuned) Review for exam

Bring the completed take-home part of the exam to the final exam session. Complete the exam in the classroom. Friday, May 11 at 8:00-9:50 in the regular classroom