

Social Science Statistics
Community Sciences 205, Section 002
Fall 2011, Wood Hall 117
Lecture: MWF 12:45-1:40
Lab 02L: Wood Hall 327, Wednesdays 11:40-12:35

Instructor: Dr. Kate Burns
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Office Hours: Wednesdays 9-10, Thursdays 10-11:30 and 1-3:30, Fridays 2-3; or by appointment

Course objectives:

This course is designed to provide an overview of statistics from a social science perspective. Having knowledge of statistics will allow you to better understand and critically analyze statistical findings from your social science classes, the news media, and your everyday life. This course requires a basic understanding of algebra and the use of a calculator.

Course Materials (Available at the bookstore)

Witte, R. S., & Witte, J. S. (2010). *Statistics*. (Ninth Edition). Hoboken, NJ: John Wiley and Sons. (Required)

SPSS for Windows, Student version (Optional). (This program is available in the on-campus computer labs, but you can purchase it if you'd like to use it off-campus. You may also choose to access SPSS off-campus through Remote Lab.)

Course requirements:

Exams. There will be four exams (100 points each) throughout the semester. The fourth exam is the final exam, which is not cumulative. These exams will utilize multiple choice questions and problems for you to work out and solve.

Makeup exam policy. There will be no make-up exams. Exceptions for catastrophic cases will be reviewed individually and will require proper documentation. If you have a conflict with a scheduled exam, please see me well before that time.

Homework Assignments. Ten homework assignments (10 points each) will be due throughout the semester on the dates noted in the course schedule. They are posted on D2L and usually are problems from your textbook (Witte problems) and additional problems (A1, A2, etc.). While the problems are posted on D2L, you will turn in your written work on paper. Please write neatly and show all of your work. Some of the homework problems will require the use of SPSS. Homework assignments are due at the beginning of class on the dates noted in the schedule. These assignments will give you a chance to practice your statistical skills. Statistics is really about practice—you must learn by doing.

Quizzes. Class attendance is expected. In order to encourage attendance, I will give 5 pop quizzes throughout the semester. These quizzes will be worth 10 points each. You will receive 5 points for simply taking the quiz and an additional 5 points if you answer the question correctly. There will be no make-up quizzes. If you are absent for any reason on a quiz day you will not receive those 10 points. If you do miss a class session, please arrange to get notes, handouts, or other materials from a classmate or one of the TAs.

Lab assignments. In the computer lab, you will learn how to use SPSS to calculate the various statistics we will be doing by hand in class. There will be 4 lab assignments worth 10 points each. These assignments will be worked on during the designated lab period. See the schedule for which weeks we will be having lab. You are encouraged to work in groups on these assignments, but each person must turn in their own assignments using their own words.

Group research project. You will be completing a group survey research project. This project will allow you to design a survey, integrate your knowledge about statistics and SPSS—and hopefully give you some interesting data to interpret! This project is worth 75 points total, divided among the different components of the project. See the syllabus for specific due dates and D2L for a more detailed description of the project. Group

members will all need to contribute to make this a successful project. As a result, at the end of the semester, you will be evaluating your fellow group members' contributions to the project. If you miss either one of the lab days for data analysis (12/7) or interpretation (12/14), there will be an automatic 10% point deduction to your overall project grade.

Please read the assigned readings before class. It will make the class easier to understand and you will get more out of it. You will need a calculator that has the ability to do all of the basic functions including squaring (x^2) and square rooting (\sqrt{x}) and you should bring it to class every day since we'll be working on practice problems. Class participation is encouraged. If you have questions about something, other people probably do too. Please ask me in class, or if you prefer, come talk to me during my office hours.

Late Policy: Labs and homework assignments are due at the beginning of class on the days noted in the schedule. If you turn in your assignment the day it is due, but after class, there will be a 5% point deduction. There will be a 10% point deduction for each day an assignment is late (I count weekend days too). If you have to miss class on a day when homework is due, you can either scan your homework and email it to me or email me your final answers for the problems before class time. You can then turn in the hard copy of your homework during the next class session and avoid the late deduction.

I reserve the right to modify the course requirements and/or schedule as deemed appropriate and with reasonable notice of such revisions.

CLASS AND LAB SCHEDULE

Week 1: September 5-9	
Introduction	Chapter 1
Describing Data with Tables and Graphs	Chapter 2
Week 2: September 12-16	
Continue Describing Data with Tables and Graphs	Chapter 2
Describing Data with Averages	Chapter 3
<i>Computer lab:</i> Work on Lab #1, Lab 1 Due 9/16	
Homework 1 Due 9/14	
Week 3: September 19-23	
Describing Variability	Chapter 4
Standard scores (z) and Normal Distributions	Chapter 5
<i>Computer lab:</i> Work on Lab #2, Lab 2 Due 9/23	
Homework 2 Due 9/23	
Week 4: September 26-30	
Continue Standard scores (z) and Normal Distributions	Chapter 5
Homework 3 Due 9/30	
Week 5: October 3-7	
Describing relationships: Correlation	Chapter 6
EXAM 1 (Chapters 1-5) October 5	
Group Research Project Summary Due 10/7	
Week 6: October 10-14	
Regression	Chapter 7
Populations, Samples, and Probability	Chapter 8
<i>Computer lab:</i> Work on Lab #3, Lab 3 Due 10/14	
Homework 4 Due 10/14	
Week 7: October 17-21	
Continue Populations, Samples, and Probability	Chapter 8

Sampling Distribution of the Mean	Chapter 9
Week 8: October 24-28	
Introduction to Hypothesis Testing: The z test	Chapter 10
Homework 5 Due 10/24	
Group Research Project Survey Rough Draft and Proposal Due 10/26	
Week 9: October 31-November 4	
Homework 6 Due 10/31	
EXAM 2 (Chapters 6-10) November 2	
More about Hypothesis Testing	Chapter 11
Week 10: November 7-11	
More more about Hypothesis Testing (☺)	Chapter 11
Estimation (Confidence Intervals)	Chapter 12
Group Research Project Survey Final Draft and Proposal Due 11/7	
Week 11: November 14-18	
T-test for One Sample	Chapter 13
<i>Computer lab:</i> Work on Lab #4, Lab 4 Due 11/18	
Homework 7 Due 11/14	
Week 12: November 21-25	
Homework 8 Due 11/21	
EXAM 3 (Chapters 11-13) November 23	
No class 11/25: Happy Thanksgiving!	
Week 13: November 28-December 2	
T-test for Two Independent Samples	Chapter 14
T-test for Two Related Samples (Repeated Measures)	Chapter 15
<i>Computer lab:</i> Work on group research project (Enter data)	
Group Research Project Data and Variable Guide Due in Lab 11/30	
Week 14: December 5-9	
Continue T-test for Two Related Samples (Repeated Measures)	Chapter 15
Analysis of Variance (One Factor)	Chapter 16
<i>Computer lab:</i> Work on group research project (Analyze data) + Lab Practical	
Homework 9 Due 12/7	
Week 15: December 12-16	
Chi-Square Test for Qualitative (Nominal) Data	Chapter 19
<i>Computer lab:</i> Work on group research project (Interpret data) + Lab Practical	
Homework 10 Due 12/14	
FINAL EXAM (Chapters 14-16, 19): December 16 10:30 a.m.-12:30 p.m.	
Group Research Project Analysis and Interpretation Due 12/16	
Group Member Evaluation Due 12/16	

Grading:	Ten homework assignments worth 10 points each:	100
	Four computer lab assignments worth 10 points each:	40
	Five pop quizzes worth 10 points each:	50
	Group Research Project worth 75 points	75
	Four exams worth 100 points each:	<u>400</u>
	Total points	665

Grades will *not* be rounded up or down to the nearest point.

A	93.0-100%	BC	78.0-82.9%	D	63.0-67.9%
AB	88.0-92.9%	C	73.0-77.9%	F	below 63.0%
B	83.0-87.9%	CD	68.0-72.9%		

Consistent with the federal law and the policies of the University of Wisconsin, it is the policy of the University of Wisconsin-Green Bay to provide appropriate and necessary accommodations to students with documented physical and learning disabilities. If you anticipate requiring any auxiliary aids or services, you should contact me or the Coordinator of Services for Students with Disabilities at 465-2849 as soon as possible to discuss your needs and arrange for the provision of services.

Academic Honesty: Cheating is not fair to honest students, is counter to the purpose of the university, and is not in your best interest. Cheating and plagiarism will not be tolerated and will be dealt with according to the University's policies on academic misconduct.