

**Sociology 4220**  
**Computing Applications for the Social Sciences**  
**Fall 2014**  
**1162 Main**  
**Wednesday 12:50-4:30pm**

**Professor:** Shirin Montazer, PhD

**Office:** 2269 FAB

**Office Hours:** By appointment only

**Email:** [shirin.montazer@wayne.edu](mailto:shirin.montazer@wayne.edu)

**Course Text:**

Levin & Fox, Elementary Statistics in Social Research: The Essentials 3rd Ed

ISBN-10: 0205638007

ISBN-13: 978-0205638000

Students are encouraged to obtain a free rental copy of SPSS. You can obtain this software by emailing [clearinghouse@wayne.edu](mailto:clearinghouse@wayne.edu) and supplying your name, email address, access ID and the course name and number.

Students should have a calculator capable of doing square roots.

**Course Description:**

This course will introduce students to the basic language and methods of quantitative analyses in the social sciences. The teaching approach involves extensive use of examples in order to illustrate the central ideas, techniques, and interpretations of quantitative methods. Topics range from basic univariate and descriptive techniques to more sophisticated bivariate and multivariate techniques—including Chi-square, Z test, Student t-test and F-test (ANOVA), Correlation and Regression analysis. The course will also discuss ways of presenting quantitative information, and how to analyze raw data both by hand and with the use of SPSS. By the end of the semester you should be able to pose and test bivariate hypotheses, conduct univariate and bivariate statistical analyses either by hand or with computer applications, and reach conclusions based on an inferential statistical analysis.

Statistics is a cumulative subject. If you fall a few weeks behind it is very difficult to catch up. Students who want to do well in this course are encouraged to come to class with questions and **READY TO WORK. Please bring the required text book, pencil and a non-scientific calculator to every lecture!**

I will also post formula sheets and other helpful handouts on blackboard before some of our lectures. Please check blackboard regularly and print any formula sheets and/or tables that I post and bring them to class.

### **The purpose of this course is to teach students:**

- The logic of statistics in social science research
- The different methods of descriptive and inferential statistical analyses
- Mathematical calculations and explanation of a number of methods
- To compute descriptive statistics by hand and using SPSS
- To carry out bivariate techniques by hand and using SPSS and interpret results.
- To understand how statistics can be used to answer research questions and test hypotheses.
- To love statistics and see that numbers are not inherently scary!!!

### **General Course Policies**

**Attendance:** Students may miss one class without penalty. Afterwards each missed class will result in a 5 point deduction in your attendance grade regardless of the reason for the absence. It is the responsibility of the student to notify the instructor of an absence to get any updates about the course schedule or get assignment materials. *You cannot make up in-class work* for days you are absent. Students arriving more than 15 minutes late will be counted as absent.

**EXTENSIONS AND MAKEUP EXAMS.** I permit makeup exams in the case of illness or death in the family or dire emergencies. I must be notified as soon as possible of these circumstances. Please send me an e-mail with your full name, and student number. I must have a written note from a health care provider or a funeral director or documentation of the emergency before you receive an extension or take a makeup exam.

<http://blackboard.wayne.edu>

Blackboard is an important part of this course. If you activate your Wayne State access ID, you will find important announcements and materials. There is a direct relationship in my courses between using Blackboard and receiving an “A” grade! Power point slides will be *posted after each class session*.

Computers are available in all WSU libraries. Sometimes it is difficult to print out everything you need for the class at the libraries, as there are heavy demands on the printers and long waiting times. I suggest you consider using the Social Science Data Lab. It is on the second floor of the Faculty Administration Building. You can use your one card to print the slides. It costs 10 cents per page. Print multiple slides on each page to save money.

**Assignments.** Students are required to complete all assignments by the due date. Students who have difficulty with a particular assignment on time are expected to contact the instructor to discuss these problems **prior to the assignment due date**. Assignments not completed by the due date will not be eligible for full credit and will be evaluated at the instructor’s discretion. Three of the six assignments will be in class “pop” assignments and will have to be handed in at the end of the class. These three assignments cannot be made up.

**Reading.** Students are required to read all course materials by the time class begins. Please ask questions if you are confused by the course text.

**Office Hours.** Office hours are by appointment only. Please e-mail me so that we can set up a mutually convenient time to meet.

**Focus.** Students are expected to be focused on class presentations during class time. **Cell phone use in class is strictly prohibited; if I see you using a cell phone during class, I will deduct 20 points from your final grade, no exceptions.** When we are using computers the computer must be used for class purposes only. Students may not use lab computers for any other purpose during class periods.

**Final Grades.** Final grades submitted by the instructor are **final**. If you believe that there has been a clerical error or other mistake you may inquire for an accounting of your grade. However, grades will be based solely on your scores on course assignments and will not be arbitrarily adjusted at the end of the term. Students who ‘need’ a particular grade should ask me early in the semester about whether they are on track.

**Academic Honesty.** Students are expected to display academic integrity in all of their work for this course. Academic dishonesty includes cheating, fabrication, and plagiarism. Any student suspected of dishonesty in their work will receive a zero for the assignment in question and referred to the department chair for further disciplinary action. If you have any questions about academic honesty, please contact me.

**Honor Code.** Students are bound by the Wayne State University honor code which states: “Wayne State University holds its students to the highest academic standards. Pride in the University and in oneself requires students to maintain an environment free from any breach of academic honesty. As lifelong representatives of Wayne State, we seek to cultivate honor, integrity, and civility in order to ensure that we earn our degree honestly and that we provide an ethical platform for our continued success”

**Registration.** Students may *drop* a class for fifteen-week classes through Wednesday, September 10<sup>th</sup>. Classes that are *dropped* do not appear on the transcript. Beginning September 11<sup>th</sup> students are no longer allowed to drop but must *withdraw* from classes. It is the student’s responsibility to request the withdrawal through the registrar’s office. Failure to do so will result in a grade of F. Students must be passing at the time of the request to get a ‘WP.’ **After November 9<sup>th</sup> you cannot withdrawal from the course and will receive a letter grade.** Incomplete ‘I’ grades are given in very limited circumstances to students who are passing the course and cannot complete final assignments due to unforeseen extenuating circumstances. Students that get a grade of incomplete must complete all assignments by January 30<sup>th</sup> 2015. Students who are not registered for this course may not attend course meetings.

**Disability.** If you have a documented disability that requires accommodations, you need to register with Student Disability Services (SDS) for coordination of your academic accommodations. The Student Disability Services (SDS) office is located at 1600 David Adamany Undergraduate Library in the Student Academic Success Services department. SDS telephone number is 313-577-1851 or 313-577-3365 (TDD only). Once you have your accommodations in place, I will be glad to meet with you privately during my office hours to discuss your special needs. Student Disability Services’ mission is to assist the university in creating an accessible community where students with disabilities have an equal opportunity to

fully participate in their educational experience at Wayne State University.

### Course Requirements and Grading

- 1) Attendance: Attendance is worth 50 points, see attendance policy above.
- 2) Homework: There will be 6 assignments worth a total of 150 points. All six will be in class assignments. Three of these assignments will take place during our regular classes and will require hand calculations (pop assignments). The other three assignments will have to be handed in the week after our lab days – they will require hand calculations and calculations with the use of SPSS.
- 3) Exams: There will be 3 exams worth a total of 300 points.

### Grade Chart:

Assignment/Evaluation	Possible Points	Your points
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HW 1	25	
HW2	25	
HW3	25	
HW4	25	
HW5	25	
HW6	25	
Exam 1	100	
Exam 2	100	
Exam 3	100	
Attendance	50 (5 points – only for non exam days)	

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TOTAL 500

Grades: A (500-460) A- (459-450) B+ (449-430) B (429-410) B- (409-400) C+ (399-385) C (384-360) C- (359-350) D (349-300) F (<300)

**Tentative Course Schedule –Subject to change**

<b>Week</b>	<b>Heading</b>
August 27	Chapter 1
September 3	Chapter 2 + 3
September 10	Chapter 4 + 5
September 17	Chapter 6 (P.g 118 – 139)
September 24	Exam 1 (All material from August 27 to September 10)
October 1	<b>Lab Day (UGL Lab C)</b>
October 8	Chapter 7 (P.g.151 – 176; 179-180)
October 15	Chapter 8
October 22	Chapter 9 (P.g. 215 – 236; 239)
October 29	<b>Lab Day (UGL Lab C)</b>
November 5	Exam 2 (All material from September 17 to October 15)
November 12	Chapter 10, 11, and Chapter 13
November 19	<b>Lab Day (UGL Lab C)</b>

November 26	No Class – University closed
December 3	Exam 3 (All material from October 22 to November 12)

\*\* This is a *tentative* schedule. Unforeseen circumstances sometimes require flexibility in scheduling. If that occurs, I will notify students in advance and provide a revised schedule.