INTRODUCTION TO STATISTICAL THINKING IN SOCIOLOGY (SOCIOLOGY 261, Section 401)

Lecture - T/Th: 11:00 am-11:50 am, LAP 160
Lab section - either section 801 (Th: 1:00 pm to 1:50 pm, Bolton 289) or 802 (Th: 2:00pm to 2:50pm, Bolton 289)

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Office Hours: Thursdays, noon to 3:00 pm or by appointment

Lab Teaching Assistant: Michael Miner
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Office hours: Mondays, 1:00 pm to 3:00 pm or by appointment

Prerequisites: The only formal prerequisite is Sociology 101 OR sophomore standing. The course involves lots of arithmetic and symbols and some algebra, so some students might want to take a basic algebra class before taking this course.

Subject: Introduction to data analysis in sociological research. Students will learn a lot of "statistics", but with the intent of using and interpreting the statistics in addressing sociological questions. Students will learn how to calculate various statistics both with a hand calculator and with SPSS software, and will learn how to interpret the statistics. The course will include both lectures and computer labs. Lectures focus on fundamental ideas in statistics, calculation of statistics using a calculator, and interpretation of the resulting numbers. Labs focus on calculation of statistics using SPSS software as well as interpretation of the resulting output. (Please see the information regarding SPSS software and how to access it, etc., below.)


Labs: Attendance at a lab section is required (Section 801 or 802). The labs will be the setting for instruction in SPSS software. The lab TA (Michael) will also go over lecture homework (after assignments are due) and can also help you with hand-calculation questions.

Homework: There will be 8 homework assignments.
-Lab (SPSS) homework: 3 lab homework assignments during the semester will require calculation of statistics in SPSS and interpretation of results. Lab (SPSS) homework will be collected in the lab sessions. Late assignments will not be accepted.

-Lecture (hand-calculation) homework: There will be 5 hand-calculation homework assignments. These will be collected at lecture. Late assignments will not be accepted.

I will post due dates of homework and solutions (after the due date) on D2L. However, to encourage attendance the actual homework questions will be distributed only in class or in lab and will not be posted on D2L. Students will be given at least one week to complete each homework assignment.

Exams: There will be three non-cumulative exams (each with about 3 or 4 hand-calculation and interpretation problems). Exam dates (subject to change) are 3/7/17 for Exam 1, 4/20/17 for Exam 2, and 5/11/17 for Exam 3. The exams will not include any questions on how to use SPSS.
**Makeup Exams:** Makeups are discouraged. Sometimes, however, they are necessary due to student or family illness or some other emergency. To be allowed to take a makeup, the student must contact me before the scheduled exam, and present appropriate documentation. Then I will decide whether a makeup exam is appropriate. Please note that not all reasons for a makeup are accepted (e.g. family vacation). Falling to show up for the scheduled appointment for the makeup exam will result in a score of zero for the exam.

**Calculator:** The homework exercises and exams will require an inexpensive calculator that can add, subtract, multiply, divide, and take square roots. Bring a calculator to every class (and to exams). Cellphone calculators cannot be used under any circumstances.

**Attendance:** Attendance in class is required.

**Class Manners:** Do not be late to class nor leave early. Students who arrive late to an exam will not be allowed to take that exam. Do not talk to classmates during class. Do not take cellphones or any other electronic device (other than a calculator) out of your pocket/purse/backpack during class, except in the case of accommodation for disability. Do not engage in other disruptive behavior (e.g. repeatedly asking administrative questions that are covered on the syllabus). There will be three stages of addressing problem behavior in class:

First stage – The student is given a verbal warning.

Second stage – If the student does not correct his/her behavior after the initial verbal warning, 30 points will be taken from one of the exam scores.

Third stage – If the student does not correct his/her behavior after the point reduction, he/she will be dropped from the course.

**Working Together:** Students are allowed to get help from each other on homework, but cannot copy each other’s answers (resulting in identical wording, duplication of unique calculation mistakes, etc…). This is considered plagiarism. All students involved in this kind of plagiarism will receive an F for their course grade and will be reported to the appropriate University authorities.

**Academic Misconduct:** Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. Policies for addressing students cheating on exams or acts of plagiarism can be found at the following: [http://www4.uwm.edu/osl/dean/conduct.cfm](http://www4.uwm.edu/osl/dean/conduct.cfm). According to UWM policy, I am required to report all suspicious cases to the Dean of Students Office. Sanctions for academic misconduct include an F grade for the course, removal from the course, and academic probation and suspension.

**Estimated Time Commitment:** It is expected that students will spend about 10 hours per week completing work related to this course. On average over the semester, students will spend 2 ½ hours in lecture or lab (37.5 hours total for a 15-week semester, 40 hours total for a 16-week semester), about 2 ½ hours reading the text and reviewing class notes (37.5 hours total for a 15-week semester, 40 hours total for a 16-week semester), and about 5 hours working on assignments (75 hours total for a 15-week semester, 80 hours total for a 16-week semester). The course requires 150 hours of total time commitment for a 15-week semester and 160 hours of total time commitment for a 16-week semester.

**Grading:** Final course grades are based on overall scores calculated by weighting different graded elements as follows:

- 1st Exam: 20%
- 2nd Exam: 20%
- 3rd Exam: 25%
- Lab (SPSS) homework (assigned and due in labs): 15%
- Lecture (hand-calculation) homework (assigned and due in lecture): 20%

There is no separate letter grade for lab - your course grade will apply to all 3 credits.
**Letter Grade Conversion**

A (94-100)
A- (90-93)
B+ (87-89)
B (83-86)
B- (80-82)
C+ (77-79)
C (73-76)
C- (70-72)
D+ (67-69)
D (60-66)
F (0-59)

**Course Schedule**
The What and the Why of Statistics (Chapter 1)
Organization of Information (Frequency Distributions) (Chapter 2)

**Lecture HW 1**
Measures of Central Tendency (Chapter 4)
Measures of Variability (Chapter 5)

**Lecture HW 2**
Lab HW 1
Introduction to Probability (relies on class notes)
Discrete Probability Distributions (relies on class notes)

**Exam 1 – 3/7/2017 (subject to change)**
The Normal Distribution (Chapter 6)

**Lecture HW 3**
Lab HW 2
Sampling and Sampling Distributions (Chapter 7)
Testing Hypotheses with Z (Chapter 9)

**Lecture HW 4**
Exam 2 – 4/20/2017 (subject to change)
Regression and Correlation (Chapter 13)

**Lecture HW 5**
Lab HW 3
Exam 3 – 5/11/2017

**SPSS Software**

SPSS is a statistical software program that calculates statistics from a data set. While usage of this program is mandatory in the labs, you don’t need to purchase this program if you are willing to use PCs in the lab, library, or Union. However if desired you can purchase this program at quite a low price through the University Software Purchase plan.

To purchase this program, visit: [http://wiscsoftware.wisc.edu/wisc/productInfo.asp?id=61510&institution=1067](http://wiscsoftware.wisc.edu/wisc/productInfo.asp?id=61510&institution=1067). You will be able to download the program after you log in the system using your ePanther ID and password. The price is $45 and this program is compatible with both Macintosh and PC.
The Secretary of the University maintains a web page that contains university policies that affect the instructor and the students in this course, as well as essential information specific to conduct of the course. The link to that web page is: http://www4.uwm.edu/secu/SyllabusLinks.pdf

**Students with Disabilities.** Verification of disability, class standards, the policy on the use of alternate material and test accommodations can be found at the following: http://www.uwm.edu/Dept/DSAD/SAC/SACltr.pdf

**Religious Observances.** Policies regarding accommodations for absences due to religious observance are found at the following: http://www4.uwm.edu/secu/docs/other/S1.5.htm

**Students called to active Military Duty.** Accommodations for absences due to call-up of reserves to active military duty are found at the following: http://www4.uwm.edu/current_students/military_call_up.cfm

**Incompletes.** You may be given an incomplete if you have carried a course successfully until near the end of the semester but, because of illness or other unusual and substantiated cause beyond your control, have been unable to take or complete the final examination or to complete some limited amount of course work. An incomplete is not given unless you prove to the instructor that you were prevented from completing the course for just cause as indicated above. The conditions for awarding an incomplete to graduate and undergraduate students can be found at the following: http://www4.uwm.edu/secu/docs/other/S31.pdf

**Discriminatory Conduct** (such as sexual harassment). Discriminatory conduct will not be tolerated by the University. It poisons the work and learning environment of the University and threatens the careers, educational experience and well-being of students, faculty and staff. Policies regarding discriminatory conduct can be found at: http://www4.uwm.edu/secu/docs/other/S47.pdf

**Academic Misconduct.** Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. Policies for addressing students cheating on exams or plagiarism can be found at the following: http://www4.uwm.edu/osl/dean/conduct.cfm

**Complaint Procedures.** Students may direct complaints to the Sociology Department Chair or the Associate Dean for Social Sciences in the College of Letters & Sciences. If the complaint allegedly violates a specific university policy, it may be directed to the Sociology Department Chair, the Associate Dean for Social Sciences in the College of Letters & Sciences, or to the appropriate university office responsible for enforcing the policy. Policies may be found at: http://www4.uwm.edu/secu/docs/other/S49.7.htm

**Grade Appeal Procedures.** A student may appeal a grade on the grounds that it is based on a capricious or arbitrary decision of the course instructor. Such an appeal shall follow the established procedures adopted by the department, college, or school in which the course resides or in the case of graduate students, the Graduate School. These procedures are available in writing from the respective department chairperson or the Academic Dean of the College of Letters & Science. Procedures for undergraduate student grade appeal can be found at http://www4.uwm.edu/letsci/upload/grievance_procedure.pdf Procedures for graduate student grade appeal can be found at http://www_graduateschool_uwm.edu/students/policies/

**Final Examination Policy.** Policies regarding final examinations can be found at the following: http://www4.uwm.edu/secu/docs/other/S22.htm

**Book Royalties.** In accord with Department of Sociology policy, the royalties from the sale of faculty-authored books to students in their classes are donated to a UWM Foundation/Sociology Account to support future awards and activities for UWM students in Sociology. Update 06/2012