Course Description. This course introduces you to statistics, with a focus on how statistics are used in social research. When you complete this course you should be able to use various tools, including graphs and tables, to describe a single variable, and to summarize the distribution of a variable using measures of central tendency and spread. In addition, you should be able to use correlation and regression to describe the relationship between a pair of variables. To teach you the basis for statistical inference, this course introduces experimental design and discusses the concepts underlying probability sampling, what a sampling distribution is, and the role of a sampling distribution in statistical inference. You then apply these concepts by learning how to test hypotheses about means, proportions, regression coefficients, and pairs of means and proportions; you also learn to calculate the confidence intervals associated with these tests. Two class projects give you the opportunity to apply your skills to analyzing data.

Prerequisites. Sophomore standing and basic algebra skills.

Course website.
- Learn@UW gives announcements, homework assignments, data sets, and handouts.
- StatsPortal website is used to enter answers for problems from the textbook and for Learning Curve extra credit. You must use StatsPortal for these assignments.
  - Access StatsPortal by going to http://courses.bfwpub.com/bps6e.php. Use the access code that comes with your text book and register with your NetID.

Course Materials.
a code that gets you access to StatsPortal (which you **must** use in this class) and a cd. Be sure you buy the correct version.

**StatsPortal.** We use StatsPortal for homework problems from the text and for the Learning Curve extra credit activity. Find homework problems posted there. Use the access code that comes with your textbook to sign up for StatsPortal as soon as possible. Use your UW NetID when you sign up for StatsPortal. Do not use any other email address.

**Computer software (Stata).** We use the statistical package Stata for homework problems that are not in StatsPortal. The TA provides instruction in Stata in lab. Outside of lab, you can access Stata in the Social Science Microcomputer classroom in 3218 Social Science if there is not another class being held there, or in 4218 Social Science, which is the primary lab for student drop-in use. You can also access Stata remotely from home through Winstat. The TA covers how to do this in lab.

**Calculators and other materials.** You need a calculator that can do “two-variable statistics” for the homework assignments and exams (e.g., the Texas Instruments TI-36X Solar, which is available at the University Bookstore Digital Outpost). Calculators should be able to compute correlations and simple two-variable regressions. These calculators are relatively inexpensive; the TI-36X is about $20. You are responsible for learning to use your calculator. You will probably also want to buy some graph paper.

**Lectures.** Lectures focus on basic concepts and their application. You will do better if you attend lecture and are prepared to participate.

**Materials for lecture.** You do not usually need to bring your textbook to class. Beginning in week 2, you must bring your formula card (from Moore) and calculator. Copies of the lecture presentation for the first lectures will be provided in class. Lectures for subsequent weeks are available in a course pack from the Sewell Social Science Building Copy Center on the 6th floor. You are responsible for material covered in class, regardless of whether or not it appears in the text or on one of the handouts. You are also responsible for material covered in the reading, whether or not it is covered in class.

**Studying.** To prepare for class, read the chapter, just skimming the problems, before the topic is covered in class. After class, read the chapter again and do the homework problems as you go; do additional problems if you are having trouble. Try to do the Learning Curve activity (for which you get extra credit) when you have finished the chapter to see how well you have mastered the material and identify areas that need review. If you have been struggling, read the text of the chapter again to solidify what you learned.

**Labs.** Lab sessions combine instruction with review of homework problems. Attendance is recorded and will be considered for grades that are borderline. Some activities, such as teaching Stata, are done only during lab. Lab meets the first week of class. Bring your calculator and bring your formula card after the first week. TA office hours are intended to provide assistance in addition to -- not instead of -- that given in lab.

**Homework.**

Homework is assigned this way:

1. Tuesday: A pdf is posted to Learn@UW most Tuesdays, between 2-8 p.m. The assignment lists problems associated with Tuesday’s lecture.
2. Thursday: A pdf is posted to Learn@UW most Thursdays between 2-8 p.m. The assignment lists the problems from Tuesday and additional problems from Thursday’s lecture.
In lab, TAs review all homework except Learning Curve. Answer keys are posted on Learn@UW when relevant.

Here are the types of homework:

1. **Problems from the text, entered in StatsPortal.** The text book provides problems for you to complete as you work your way through the chapter and as you finish it. We recommend doing the versions of these problems in the ebook, using paper and a calculator as you read the chapter. Then enter your answers into StatsPortal. The assignment is recorded automatically. StatsPortal uses points to indicate which is the correct answer or the relative difficulty of the problem.

2. **Research Practice problems using Stata.** These are small data analysis reports. Submit these to Learn@UW before 9:30 on the Tuesday they are due.

3. **Article Responses.** You read an article and answer questions. Be prepared to discuss in lab! Submit these Learn@UW before 9:30 on the Tuesday they are due.

4. **Learning Curve activities in StatsPortal.** For every chapter for which you complete a LC activity on line by the due date you will receive a small portion of extra credit. This can be helpful if your grade is borderline. These problems are not reviewed in lab.

**Homework due dates.** All homework is due the Tuesday after it was assigned at the beginning of class, 9:30. The TA goes over the answers in the immediately following lab, on Tuesday afternoon or Wednesday. Note that StatsPortal does not accept homework after 9:25 on the morning it is due. Homework done on paper that is turned in after 9:30 a.m. the day it is due will be considered late.

**Extensions for homework.** Although you may discuss these matters with the TA, only the instructor may authorize special arrangements for homework. Send an email to the instructor and cc the TA with the subject line: *Soc360 – request for extension for homework for Chapter nn due xx*

**Cooperating on homework assignments.** You are encouraged to discuss the problems on the weekly homework assignments with other students in the class to further your understanding of the material, but you must write your answers up independently. You may not simply copy another’s work.

**Projects: Research Data Analysis Reports.** Two data analysis research reports serve as take-home exams. These projects are meant to put the material presented by Moore into context and to help solidify what you have learned. The first is a short project that focuses on descriptive statistics and graphical display of data. The final project requires you to apply the skills you have learned throughout the course. Details are provided in class. You may not cooperate with other students on these assignments; treat them like take-home exams.

**Preparing assignments.** Use MS Word to prepare assignments other than StatsPortal. This includes Research Practice, Article Responses, and the two Projects. When necessary, you can cut results from Stata and paste into your document. Make a pdf and submit to the Learn@UW dropbox following the instructions on the assignments.

**Examinations.** There are three non-cumulative, in-class midterm examinations. Examination questions are multiple choice. A copy of the tables and formulas handout from the Moore book will be provided to use on the exams. You may use this reference card and a calculator, but no other materials for the exam. The tables and formulas handout has copies of almost all of the formulas covered in the course.
Missed and Make-up Examinations. If you have a schedule conflict (e.g., religious holiday or athletic event) with an exam you must discuss it in advance by e-mail with the instructor, and cc your TA. You may copy the TA so that the TA is informed, but address your e-mail to the instructor. If an illness or other unanticipated emergency prevents you from taking an exam, you must contact the instructor as soon as possible. Permission of the instructor is required in order to take a make-up exam or the final comprehensive exam. Although you may discuss these matters with the TA, only the instructor may authorize special arrangements for an exam.

Students must take three exams in order to pass the course. For the first two exams, a make-up exam will be offered within a week of the original exam. A special expanded comprehensive final examination will be required for (1) students who miss the third exam at the scheduled time, (2) students who miss an original exam and its make-up, and (3) students who miss more than one original exam, have taken a makeup, and have the permission of the instructor. The expanded comprehensive final examination will be held the day after the regular final. There will be no other makeup examination.

In general, the make-up exam will be different from and more difficult than the original exam. Make-up exam scores can lower, but cannot raise, your final grade. (That is, in calculating the final grades, make-up exam scores will be included if they lower the final grade, but not if they raise it.) This policy has been adopted (1) in response to student concerns that those taking a make-up were at an unfair advantage because of the additional study time; and (2) to reduce the incentive of students taking a make-up to consult with other students in the class about exam content.

Disagreements about Grading of an Exam. If you disagree with the way a question has been graded, you must do the following: (1) Make a copy of the exam sheet with your answer and the grade. (2) Attach to it a written explanation of why you feel the grade is inappropriate. If you dispute a substantive point, document your point of view citing the text, reading, or lecture. If you interpreted the question differently from the way it was intended, explain your interpretation and why you believe your answer is correct given that interpretation. (3) Describe in the written statement what you believe would be a fair grade. (4) Give the copy of the exam and the written statement to the instructor no later than 1 week after the TA hands back graded exams.

We will (1) respond to you in writing; (2) change everyone’s grade accordingly if there is a general problem; (3) note any change in grade as an “adjustment” (to be taken in to account if you have a border-line grade).

Final grades.

To earn a C or better you must:
1. Take all exams and earn C or better in at least two of them and
2. Complete both projects and earn a C or better on one of them.

The course components contribute to your final grade this way:

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<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams</td>
<td>55%</td>
<td>(15%, 20%, 20%)</td>
</tr>
<tr>
<td>Data analysis projects</td>
<td>25%</td>
<td>(8%, 17%)</td>
</tr>
<tr>
<td>On-line homework</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Research practice and article responses</td>
<td>15%</td>
<td></td>
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Attendance at lab Considered for borderline grades
Learning Curve Extra Credit
Administrative matters.

Graduate students and honors students. Send the instructor an email by the end of the first week of class. The projects will be modified for you.

Athletes. You must provide a letter from the athletic department listing dates that you will be away for games in order to be excused from lab. Provide this information by the end of the second week of class. We assume that your excused absence begins 2 hours before the departure time.

Religious observances. Please check the class schedule and notify the instructor if you have a religious observance that conflicts with scheduled deadlines for the class so that we can make alternate arrangements.

Accommodations. Send the instructor an email by the end of the second week if you are eligible for special arrangements or accommodations for testing, assignments, or other aspects of the course. This may be the case if English is your second language or if you are in the first generation in your nuclear family to attend college, that is, if neither of your parents or guardians has attended college. Accommodations are provided for students who qualify for disability services through the McBurney Center. Their website has detailed instructions about how to qualify: http://www.mcburney.wisc.edu/. Provide a copy of your accommodations request (VISA) to the instructor by the end of the second week of class. We try to reserve rooms and proctors by the third week in class, so we must know of all accommodations by then.

E-mail list and announcements.

1. Make a StatsPortal account (using your UW NetID). Check StatsPortal Tuesday and Thursday between 2 and 8 pm for StatsPortal problems.

2. Check Learn@UW Tuesday and Thursday between 2 and 8 pm for cumulative homework assignments and daily for announcements.

3. We use the Learn@UW e-mail list for messages.

If you have trouble with your e-mail address or need to get one, call the DOIT Help desk at 256-HELP.

Communication. The best way to reach the instructor and TAs is by email. Usually email your TA and cc the instructor. When you send a message to the instructor, cc your TA for your section. Begin the subject line with “Soc360.” The instructor and TAs begin email messages in the same way to make it easy for you to search for replies and announcements.

Appointments. Unfortunately, I often cannot make an appointment to meet within a day or two of any request, so please plan ahead.

Privacy of Grades. Use only your ID on all examinations and assignment; no names. To protect your privacy, we cannot give grades over the telephone or by email. If you want an assignment or grade given to someone else, you must give the instructor a letter of authorization.

Classroom deportment. Attendance at lecture does not contribute to your grade. So if you come to class, be respectful of instructor, TAs, and other students. Turn your cellphone off (not to vibrate) before the lecture or lab begins. No use of headphones and no texting during class; you may be asked to stop or leave the class. Similarly, most students will not need to use a laptop during class, so laptops are not allowed to be used during lecture except by arrangement with the instructor.

Please sit in the front half of the room, in front of the TAs.
If you need to leave the class and return (for example, because you need to take a telephone call for a medical emergency) make arrangements with the instructor in advance. Napping and reading a novel or newspaper are commendable activities, but they are more comfortably done elsewhere and are not appropriate during class.

**Academic honesty.** As with all courses at the University of Wisconsin, you are expected to follow the University’s rules and regulations pertaining to academic honesty and integrity. The standards are outlined by the Office of the Dean of Students. See their website ([http://www.wisc.edu/students/conduct/uws14.htm](http://www.wisc.edu/students/conduct/uws14.htm)) for a complete description of behaviors that violate the University’s standards as well the disciplinary penalties and procedures. If you have questions about the rules for any of the assignments or exams, please ask your instructor or one of the TA.

**Departmental notice.** The Department of Sociology regularly conducts student evaluations of all professors and teaching assistants near the end of the semester. Students who have more immediate concerns about this course should report them to the instructor or to the chair, 8128 Social Science (oliver@ssc.wisc.edu).

**Feedback.** I am interested in hearing your reactions to the course, and your suggestions for improvement. At one point during the semester we may have an informal evaluation at which time you are able to write comments or make suggestions anonymously. In addition, please feel free to e-mail comments or suggestions to schaeffe@ssc.wisc.edu or make an appointment to see me.