Sociology 261: Introduction to Statistical Thinking in Sociology

Fall 2021
Lecture: Tuesdays and Thursdays 12:30-1:20pm in Bolton B68
Lab: Thursdays 2:00-2:50pm in Bolton 293

Theresa Beaumier
Email: beaumier@uwm.edu
Office Hours: Tuesdays 1:20-3:20pm in person and on Zoom
Office: Bolton 770

Course Description
From casual news watchers to businesspeople and academics, we’re all confronted with a myriad of statistics throughout our lives. We rely on statistics to learn about our world, shape our opinions, and inform our professional decisions. Sociologists use statistics to study how society works, analyzing data on a wide array of topics, such as health, crime, education, racial inequalities, and public opinion. In this course, we will build a basic statistics toolkit, including calculating and interpreting statistics and becoming familiar with SPSS software. We will focus on examining questions that are important to sociologists and other social scientists, but the content of this class is relevant to many disciplines.

Prerequisites
1. Sociology 101 OR sophomore standing
2. A satisfactory grade in General Education Requirement Quantitative Literacy A (GER QL-A) (e.g. Math 102, 103, 105, 108, or 111)

Successful Completion of Sociology 261
- Meets the UWM General Education Requirement Quantitative Literacy – B (GER QL-B)
- Is required for the BA in Sociology and the BS in Criminal Justice
- Meets the introductory statistics requirement for the Quantitative Social Data Analysis (QSDA) certificate program

Course Materials
- SPSS: Students must have access to SPSS software. You may use SPSS software on campus computers or download it from the UWM SoftwareShop.
- Calculator: A basic calculator is required for this course. The calculator will be used to add, subtract, divide, multiply, and take square roots. Students will be required to bring a calculator to class and to use during exams. Cellphones will not be allowed during exams.
• **Optional Textbook:** There is no required textbook for this course. However, students who wish to reference a textbook may access the following free resource: Online Statistics: An Interactive Multimedia Course of Study ([http://onlinestatbook.com/](http://onlinestatbook.com/)).

**Panther Community Health and Safety Standards**

UWM has implemented reasonable health and safety protocols, taking into account recommendations by local, state and national public health authorities, in response to the COVID-19 pandemic. As a member of our campus community, you are expected to abide by the Panther Interim COVID-Related Health & Safety Rules, which were developed in accordance with public health guidelines. These standards apply to anyone who is physically present on campus, UWM grounds, or participating in a UWM-sponsored activity:

- All individuals visiting UWM facilities must wear face coverings while indoors;
- Unvaccinated students coming to campus are required to test weekly for COVID-19; and,
- You should check daily for COVID-19 symptoms and not come to campus if you are feeling sick.
- If you test positive for or are diagnosed with COVID-19 based on symptoms, you should complete this Dean of Students Office form: [https://cm.maxient.com/reportingform.php?UnivofWisconsinMilwaukee&layout_id=4](https://cm.maxient.com/reportingform.php?UnivofWisconsinMilwaukee&layout_id=4).

Additional details about student and staff expectations can be found on the UWM COVID-19 webpage: [https://uwm.edu/coronavirus/](https://uwm.edu/coronavirus/).

**Class Structure**

This class will meet twice a week for lecture in Bolton B68 (Tuesdays and Thursdays 12:30-1:20) and once a week for lab in Bolton 293 (Thursdays 2-2:50pm).

Students are expected to attend all lecture and lab sessions, unless ill or required by the University to stay home and isolate. Students who miss class are responsible for making up work by reviewing class materials posted on the course Canvas site, requesting notes from other students in the course, and contacting the instructor with any questions about the material they missed.

All students are expected to review their notes following each class session. Assignment deadlines are listed in the course schedule below.

**Grades**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 quizzes (of 12)</td>
<td>20%</td>
</tr>
<tr>
<td>7 homework assignments (of 8)</td>
<td>35%</td>
</tr>
<tr>
<td>3 exams (of 4)</td>
<td>45%</td>
</tr>
</tbody>
</table>

**Grading Scale**

<table>
<thead>
<tr>
<th></th>
<th>B+</th>
<th>87-89</th>
<th>C+</th>
<th>77-79</th>
<th>D+</th>
<th>67-69</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td>93-100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-</td>
<td>90-92</td>
<td>B-</td>
<td>80-82</td>
<td>C-</td>
<td>70-72</td>
<td>D-</td>
<td>60-62</td>
</tr>
</tbody>
</table>

**Quizzes**

There will be 12 quizzes throughout the semester, but only 10 will be counted towards the final grade. This means that if more than 8 quizzes are completed, only the 10 highest scores will be counted. Quizzes will be completed on Canvas and will be due on Tuesdays at 11:59pm. They will be open notes. Quiz questions will
focus on material covered during the previous week’s lecture and lab sessions, but they may also cover older material.

**Homework**
There will be 8 homework assignments throughout the semester, but only 7 will be counted towards the final grade. This means that if all 8 homework assignments are completed, only the 7 highest scores will be counted. A hard copy of lecture homework assignments and an electronic copy (via Canvas) of lab homework assignments will be due at the beginning of lecture meetings (12:30pm) on the dates shown in the course schedule below.

Students who are unable to attend class on the day a lecture homework assignment is due should email photos of their homework assignment to the instructor prior to 12:30pm. See the late assignment policy below.

**Late Assignments**
It is essential that students turn in all assignments on time. If you know that you will be unavailable on the day an assignment is due, please plan to submit it in advance. Quizzes and homework will be accepted up to three days late. The grade will be lowered by 5% (a half a letter grade) for each day (24 hours) they are late, beginning at the time the assignment is due. No assignments will be accepted after three days.

**Exams**
There will be four in-person exams given throughout this course (October 5th, November 4th, December 9th, and December 21st). All exams will be closed book, meaning that students will not be allowed to access any class materials or other resources. The first three exams will cover only the most recent unit, and the final exam will be cumulative. Only three exams will count towards your final grade, meaning that your lowest score will be dropped.

Exams will only be rescheduled in cases where 1) you notify the instructor by email at least one week prior to the exam with a valid reason that you cannot complete the exam on the assigned day or 2) there is an unforeseeable circumstance (e.g. University-mandated isolation) AND you notify the instructor as soon as the circumstance arises. Be prepared to submit any documentation requested by the instructor to verify your valid reason for missing an exam. It is in your best interest to contact the instructor right away if you believe you may miss an exam at any point in the semester. Family vacations will not be considered a valid reason for missing an exam.

**Academic Misconduct**
All coursework submitted must be your own work and cannot be copied from other students. Cheating and plagiarism will not be tolerated. All UWM students must follow the academic honor code. Possible consequences for not following the honor code include receiving no credit for an assignment, failing the entire course, and having a letter attached to the student’s permanent academic record.

**Credit Hours**
The university has asked instructors to outline how much time students will spend working on various aspects of their classes. As the UW System assumes that “study leading to one semester credit represents an investment of time by the average student of not fewer than 48 hours” (UWS ACPS 4), a 3-credit course such as this one will require a minimum of 144 (3 x 48) hours of your time.

This class will require approximately:
• 2.5 hours per week attending lecture and lab
• 4.5 hours reviewing notes, taking quizzes, and completing homework assignments
• 2 hours preparing for exams
These are averages. Some weeks may involve more or less time depending on whether an exam or homework assignment is scheduled.

Canvas
Our course has a Canvas website (uwm.edu/canvas). You will use the same username and password that you use for your UWM email account. If you have any questions about content on the course website, please contact me. If you have questions about, or problems using, the Canvas website, please contact Canvas 24/7 student support at: https://uwm.edu/canvas/students/?target=get-help.

Contact Details
I look forward to working with you this semester! Please check your UWM email at least once every weekday (Monday-Friday) for any correspondence about the class. Be sure your Canvas account is set up to forward class announcements to your Outlook account.

If you have any questions or concerns, you are welcome to visit me during office hours, which will be held on Tuesdays from 1:20-3:20pm both in person and on Zoom. If you are unavailable during that time, we can set up an appointment to meet in person or online. Additionally, you are always welcome to email me with questions. Please allow 1-2 business days for me to reply to your email. Emails sent during the weekend may not be answered until Monday. Do not wait until the night before an exam or assignment is due to email me with questions.

Course Schedule
This course schedule is subject to change at the discretion of the instructor. Students will be notified in advance of any changes.

<table>
<thead>
<tr>
<th>Week</th>
<th>Chapter / Topic</th>
<th>Day</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Class Introduction</td>
<td>Thursday 9/2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Frequency Distributions</td>
<td>Tuesday 9/7</td>
<td>Quiz 1 due on Canvas at 11:59pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thursday 9/9</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Measures of Central Tendency and Variability</td>
<td>Tuesday 9/14</td>
<td>Quiz 2 due on Canvas at 11:59pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thursday 9/16</td>
<td>Lecture Homework 1 due in lecture at 12:30pm</td>
</tr>
<tr>
<td>4</td>
<td>Probability</td>
<td>Tuesday 9/21</td>
<td>Quiz 3 due on Canvas at 11:59pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thursday 9/23</td>
<td>Lecture Homework 2 due in lecture at 12:30pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lab Homework 1 due on Canvas at 12:30pm</td>
</tr>
<tr>
<td>5</td>
<td>Probability / Exam Review</td>
<td>Tuesday 9/28</td>
<td>Quiz 4 due on Canvas at 11:59pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thursday 9/30</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Tuesday 10/5</td>
<td>Exam 1</td>
</tr>
<tr>
<td>Week</td>
<td>Chapter / Topic</td>
<td>Day</td>
<td>Assignments</td>
</tr>
<tr>
<td>------</td>
<td>----------------</td>
<td>---------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>Normal Distribution</td>
<td>Thursday 10/7</td>
<td>Quiz 5 due on Canvas at 11:59pm</td>
</tr>
<tr>
<td>7</td>
<td>Normal Distribution</td>
<td>Tuesday 10/12</td>
<td>Quiz 6 due on Canvas at 11:59pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thursday 10/14</td>
<td>Lecture Homework 3 due in lecture at 12:30pm</td>
</tr>
<tr>
<td>8</td>
<td>Sampling and Sampling Distributions</td>
<td>Tuesday 10/19</td>
<td>Lecture Homework 4 due in lecture at 12:30pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thursday 10/21</td>
<td>Lab Homework 2 due on Canvas at 12:30pm</td>
</tr>
<tr>
<td>9</td>
<td>Hypothesis Testing / Exam Review</td>
<td>Tuesday 10/26</td>
<td>Quiz 7 due on Canvas at 11:59pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thursday 10/28</td>
<td>Lecture Homework 4 due in lecture at 12:30pm</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Tuesday 11/2</td>
<td>Quiz 8 due on Canvas at 11:59pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thursday 11/4</td>
<td>Exam 2</td>
</tr>
<tr>
<td>11</td>
<td>Hypothesis Testing</td>
<td>Tuesday 11/9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thursday 11/11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Correlation</td>
<td>Tuesday 11/16</td>
<td>Quiz 9 due on Canvas at 11:59pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thursday 11/18</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Correlation / Regression</td>
<td>Tuesday 11/23</td>
<td>Quiz 10 due on Canvas at 11:59pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thursday 11/25</td>
<td><strong>Thanksgiving – NO CLASS</strong></td>
</tr>
<tr>
<td>14</td>
<td>Regression</td>
<td>Tuesday 11/30</td>
<td>Quiz 11 due on Canvas at 11:59pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thursday 12/2</td>
<td>Lecture Homework 5 due in lecture at 12:30pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lab Homework 3 due on Canvas at 12:30pm</td>
</tr>
<tr>
<td>15</td>
<td>Exam Review</td>
<td>Tuesday 12/7</td>
<td>Quiz 12 due on Canvas at 11:59pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thursday 12/9</td>
<td>Exam 3</td>
</tr>
<tr>
<td>16</td>
<td>Course Wrap-up</td>
<td>Tuesday 12/14</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tuesday 12/21</td>
<td>Exam 4 – Cumulative Final</td>
</tr>
</tbody>
</table>

**UNIVERSITY AND SOCIOLOGY DEPARTMENT POLICIES**

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 page is: [https://uwm.edu/secu/wp-content/uploads/sites/122/2016/12/Syllabus-Links.pdf](https://uwm.edu/secu/wp-content/uploads/sites/122/2016/12/Syllabus-Links.pdf)

1. Students with disabilities. Notice to these students should appear prominently in the syllabus so that special accommodations are provided in a timely manner. [http://uwm.edu/arc/](http://uwm.edu/arc/)
2. Religious observances. Accommodations for absences due to religious observance should be noted. 
   [Link](https://apps.uwm.edu/secu-policies/storage/other/SAAP%202.20Accommodation%20of%20Religious%20Beliefs.pdf)

3. Students called to active military duty. Accommodations for absences due to call-up of reserves to active 
   military duty should be noted. Students: [Link](http://uw.edu/active-duty-military/) Employees: 
   [Link](https://www.wisconsin.edu/ohrwd/download/policies/ops/bn9.pdf)

4. Incompletes. A notation of "incomplete" may be given in lieu of a final grade to a student who has carried 
   a subject successfully until the end of a semester but who, because of illness or other unusual and 
   substantiated cause beyond the student's control, has been unable to take or complete the final 
   examination or to complete some limited amount of term work. [Link](https://apps.uwm.edu/secu-
   policies/storage/other/SAAP%2013.%20Incomplete%20Grades.pdf)

5. Discriminatory conduct. 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. [Link](https://apps.uwm.edu/secu-policies/storage/other/SAAP%205-
   1.%20Discriminatory%20Conduct%20Policy.pdf)

6. Title IX/Sexual Violence. Title IX is a federal law that prohibits sex discrimination in education program or 
   activities, and UWM policy prohibits such conduct (see Discriminatory Conduct, above). This includes 
   sexual violence, which may include sexual harassment, sexual assault, relationship violence, and/or 
   stalking in all educational programs and education-related areas. UWM strongly encourages its students to 
   report any instance of sex discrimination to UWM’s Title IX Coordinator ([titleix@uwm.edu](mailto:titleix@uwm.edu)). Whether or 
   not a student wishes to report an incident of sexual violence, the Title IX Coordinator can connect students 
   to resources at UWM and/or in the community including, but not limited to, victim advocacy, medical and 
   counseling services, and/or law enforcement. For more information, please visit: [Link](https://uw.
   edu/sexual-assault/). 

7. Academic misconduct. Cheating on exams or plagiarism are violations of the academic honor code e and 
   carry severe sanctions, including failing a course or even suspension or dismissal from the University. 
   [Link](https://uw.edu/deanofstudents/academic-misconduct/)

8. Complaint procedures. Students may direct complaints to the head of the academic unit or department in 
   which the complaint occurs. If the complaint allegedly violates a specific university policy, it may be 
   directed to the head of the department or academic unit in which the complaint occurred or to the 
   appropriate university office responsible for enforcing the policy. [Link](https://apps.uwm.edu/secu-
   policies/storage/other/SAAP%205.1.%20Discriminatory%20Conduct%20Policy.pdf)

9. 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/School. [Link](https://apps.uwm.edu/secu-policies/storage/other/SAAP%201-
   10.%20Grade%20Appeals%20by%20Students.pdf)

10. LGBT+ resources. Faculty and staff can find resources to support inclusivity of students who identify as 
    LGBT+ in the learning environment. [Link](http://uw.edu/lgbtcr/)

11. Smoke and Tobacco-Free campus. UWM prohibits smoking and the use of tobacco on all campus property. 
    [Link](https://apps.uwm.edu/secu-policies/storage/other/SAAP%2010-8.%20Smoke%20and%20Tobacco-
    Free%20Campus%20Policy.pdf) 12. Final Examinations. Information about the final exam requirement, the 
    final exam date requirement, and make-up examinations. [Link](https://apps.uwm.edu/secu-
    policies/storage/other/SAAP%201-9.%20Final%20Examinations.pdf)

Updated 08/2021