SOCIOLOGY 593: QUANTITATIVE ANALYSIS
Winter Quarter, 2015
Mondays, 2:00-4:50 PM; 450 NH

Instructor: Melissa Thompson, Ph.D.  Phone: 503-725-3614
Office: 217F Cramer Hall  Office hours: 11-12 Mon & Fri and by appointment
E-mail: mthomp@pdx.edu

Course Description
Sociology 593 is designed for first-year sociology graduate students. The main goal is to learn how to statistically analyze quantitative data using SPSS. This course teaches applied statistics, so rather than focusing on mathematics we will spend the majority of our time positing hypotheses, generating statistics using SPSS, and interpreting the findings. Soc 593 is an introductory course, so if you plan on analyzing quantitative data for your thesis you will probably need to take additional, more advanced statistics courses. The School of Community Health, offers a good 2-part course: USP 534 in the spring term and USP 554 in the fall term. Within the sociology department, we offer SOC 695 (Advanced Methods in Sociology) in the spring term.

Course Objectives
• Learn basic techniques for analyzing quantitative data.
• Learn the statistical package SPSS.
• Gain experience writing a quantitative research paper.
• Understand other researchers’ published quantitative research.
• Develop a literature review that will help you write your Master’s thesis.
• Sharpen your critical thinking skills.

Course Materials

Required: Several peer-reviewed articles will provide examples of how to present and discuss data analysis results. These articles are accessible via D2L (d2l.pdx.edu).

Required: A data set (in SPSS) that is of theoretical interest to you.

Optional: If you do not find a data set of interest, the default will be the GSS (General Social Survey).

Optional: Discovering Statistics using SPSS for Windows, by Andy Field (2000). [I recommend this book if you are planning on analyzing quantitative data for your thesis or if you would like to learn more advanced statistics/SPSS functions on your own.]
COURSE POLICIES AND PROCEDURES

- **Late Work:** Unless a student has received prior approval from the instructor, late work will not be accepted. You are expected to submit all homework, paper drafts, and final papers by the stated deadline. Any late submissions will not be graded, and the student will receive a 0 for the assignment.

- **Class Sessions:** Most class sessions will have the following structure:
  a. [approximately 10 minutes] Announcements and discussion of the homework from the previous week.
  b. [approximately 1-2 hours] Presentation of the week’s materials. Examples, discussion of the week’s readings, important concepts to know and apply.
  c. [remainder of class time] Students work on the week’s homework assignment. The instructor will be circulating throughout the room, available to answer any questions you may have. As the quarter progresses, some students may also want to spend this time working on their final projects, too.

- **Classroom Etiquette:** The following behaviors are disruptive to the class and you are asked to refrain from them:
  a. Arriving late/leaving early
     - **Note:** once the “homework” portion of the class commences, that is considered an informal work period. Hence, you are free to step out for brief bathroom/water/leg-stretching breaks as you desire. Other than the homework period, you are expected to be in the classroom, ready to work and pay attention.
  b. Using the computers (or your own personal devices) for anything other than class-related work. Thus, checking email, surfing the web, and other non-class activities are not allowed during class time.
  c. Talking over someone else/excessive chattiness not related to the class.

  **Note:** although not technically a “disruptive” behavior, you are also asked to be aware that OIT has a food and drink policy that requires all lab users to place their food and drink in the red bin by the door, in order to protect the student-funded hardware and furniture.

- **Weekly Readings:** For each week, you have assigned readings. You are expected to come to class each week, having completed all required readings. The amount of reading is relatively light (especially for a graduate class). This is intentional; you should take these readings seriously, and completely understand what they have to say, and the examples provided, before attending class. My recommendation—to help you fully understand the SPSS examples provided in the textbook—is that you run through the examples yourself, actually trying to get your SPSS output to match that in the textbook. If you come to class without understanding the reading, you will fall behind. Because this class is meant to build on material learned in previous weeks, falling behind will cause difficulty throughout the entire quarter.
GRADING

1. **Weekly Homework Assignments (30%)**
   Each week you will be given an assignment that will be based on the weekly readings and the lab lecture. This assignment will be posted on D2L (d2l.pdx.edu). Send completed assignments to mthomp@pdx.edu in two files: the homework in MS Word and relevant SPSS output (the output can also be copied and pasted into Word) by Fridays at 5:00pm (earlier submission is always welcome). In the email subject line please write “YOUR NAME, week # homework” (e.g., “Melissa’s week 1 homework”). Note: To allow for adequate grading time, late homework submissions will not be accepted without prior approval.

2. **Research paper (60%)**
   The majority of your grade is based on your final research paper. This paper will be 15-30 pages in length, and will be based on analysis of the data set that you have acquired (the GSS is the default data set if you can’t find one that interests you). Chapter 9 of *Data Analysis with SPSS* discusses the main parts of the paper. This paper is due by Monday, March 16, at 5:00pm.

   Each week you should work on your research paper, however, you will not be turning it in to the instructor unless otherwise notified. For more information on the research paper, see the notes at the end of each week’s homework assignment and the document “Timetable for Writing a Research Paper.” After the lecture part of the weekly class (approximately 1.5 hours), students and the instructor will stay in the computer lab until approximately 4:50 p.m. during which time students can work on their homework assignment or seek guidance from the instructor regarding their research paper. You may not leave early, even if your homework for that week is finished. If you finish your homework early, you are expected to use that time to work on your final research paper.

   Students are encouraged to seek the help of the Social Sciences Librarian, Kimberly Pendell: kpendell@pdx.edu, (503.725.4501). She can help you develop a research strategy for the literature review (in which you will be developing your hypotheses) for your research paper. The Writing Center is also a valuable resource to help you develop your technical writing skills (phone: 503.725.3570).

3. **Oral presentation (10%)**
   During week 10 students will present their main research findings. The feedback you receive from the instructor and fellow students will help you revise your findings for the final draft. Note: To accommodate all research presentations, we will need to meet twice during week 10. The scheduling for this second meeting will occur in class on January 26 (week 4).
# Course Schedule

(subject to change with reasonable notice)

<table>
<thead>
<tr>
<th>Week &amp; date of class meeting</th>
<th>Topic</th>
<th>Readings/Tasks (readings must be completed before class)</th>
<th>Homework</th>
<th>Deadlines</th>
</tr>
</thead>
</table>
| Week 1 (January 5)          | Introduction, Univariate Analysis, Levels of Measurement | • Sweet & Grace-Martin, Chapter 1-3;  
• Uggen, Manza, and Thompson, 2006, especially Table 3 and its discussion on pages 291-296. | Problems from Chapters 1 and 3. | Friday, January 9 at 5:00pm |
| Week 2 (January 12)         | Indexes/Scales | • Sweet & Grace-Martin, Chapter 4;  
• Begin Sweet & Grace-Martin, Chapter 9: Writing a Research Report;  
• Moon et al. 2011, especially the scales (indexes) discussed under “The Association with Delinquent Peers and the Legitimacy of Violence” and “Strain and Negative Emotions (Anger and Depression)” (pp. 858-861). | Problems from Chapter 4. | Friday, January 16 at 5:00pm |
| Week 3 (January 19)         | No class, MLK Day | • Finish Sweet & Grace-Martin, Chapter 9: Writing a Research Report  
• Finalize plans for a data set to use in your final project; start running frequencies and bivariate analyses to determine your best bests for independent and dependent variables.  
• Meet with social sciences librarian; work on the first draft of introduction, literature review, data and methodology, and references (due in February 2 class meeting). | No statistics homework. | |
| Week 4 (January 26)         | Crosstabs | • Sweet & Grace-Martin, Chapter 5, pages 105-116 (up through the end of the “Bar Charts” section);  
• Finish reading Sweet & Grace-Martin, Chapter 9: Writing a Research Report  
• Sobolewski and Amato, 2007, especially “Descriptive Results” crosstabs discussion on pages 1112-1113. | Problems from Chapter 5. | Friday, January 30 at 5:00pm  
Research paper draft | Paper draft due February 2 |
| Week 5 (February 2)         | Correlation and ANOVA | • Due at the beginning of the February 2 class meeting: First draft of introduction, literature review, data and methodology, and references, plus an abbreviated draft of this document. | Problems from Chapters 5 and 6. | Friday, February 6 at 5:00pm |

(Note: week 5 continued on next page)
<table>
<thead>
<tr>
<th>Week &amp; date of class meeting</th>
<th>Topic</th>
<th>Readings/Tasks (readings must be completed before class)</th>
<th>Homework</th>
<th>Deadlines</th>
</tr>
</thead>
</table>
| Week 5 (February 2); continued from previous page | Correlation and ANOVA | **Readings for this class:**  
- Rest of Sweet & Grace-Martin, Chapter 5, starting on page 116 (starting with “Analyzing Bivariate Relationships Between Two Scale Variables”);  
- All of Sweet & Grace-Martin, Chapter 6  
- Ng and Burke, 2004 (see correlation and ANOVA examples) | Feedback on another student’s first draft | Feedback on peer’s paper due February 9 |
| Week 6 (February 9) | Simple Regression | **Due** at the beginning of the February 9 class: Feedback on another student’s first draft (and meet with them face-to-face in our February 9 class).  
- Sweet & Grace-Martin, Chapter 7, pages 161-170  
- Kwon and Baack, 2005 | Problems from Chapter 7. | Friday, February 13 at 5:00pm |
| Week 7 (February 16) | Multiple Linear Regression |  
- Sweet & Grace-Martin, Chapter 7, pages 171-182  
- Within your own area of interest, find and read a peer-reviewed article that uses linear (a.k.a. OLS [ordinary least squares]) regression, bring to class on February 16 | Problems from Chapter 7. | Friday, February 20 at 5:00pm |
| Week 8 (February 23) | Logistic Regression |  
- Sweet & Grace-Martin, Chapter 8;  
- Thompson 2010, especially the description of Table 2 results, the discussion, and conclusion (pp. 110-118). | Problems from Chapter 8. | Friday, February 27 at 5:00pm |
| Week 9 (March 2) | Final thoughts on Regression |  
- No reading  
- No homework assignment. | Work on your oral presentation and research paper. |  |
| Week 10 (March 9) | Oral presentations and individual work on projects | **Note:** To accommodate all presentations (and to make up for missing class on January 19), we will meet twice during week 10. This second meeting will be scheduled during our week 4 class meeting. | Based on oral presentation feedback, revise and finalize your research paper. |  |

Final research papers are due by **5:00pm on Monday, March 16**. Papers can either be emailed or left in my sociology department mailbox.