

**Professor Battle**  
**Quantitative Methods**  
**PLAN: Fall 2023**

|                   | <u>Homework Assigned</u>  |
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| Week 1<br>Aug. 29 | <p>Using a pencil, label the levels of measurement for all variables starting on page 467.</p> <p>Page 60 (2.5). Be sure to use SPSS.<br/> - Also produce appropriate graphic presentation for gender, guns, and education</p> <p>Page 63 thru 65. Do all exercises, being sure to create tables.</p> <p>Read Chapters 2 &amp; 3</p>  |
| Week 2<br>Sept. 5 | <p>Page 88 (3.17)</p> <p>Combine <i>premarsx</i> with <i>xmarssex</i> into a new variable. Select the most appropriate measure of central tendency and write a summary sentence about the variable.</p> <p>Get frequency distributions for the two variables – <i>degree</i> and <i>educ</i> – that measure education. Use the Recode command to collapse <i>educ</i> into categories comparable to <i>degree</i>. That is, use the categories 0-11 for less than high school, 12 for high school graduates, 13-15 to approximate the number of junior college or two-year program graduates, 16 for college graduates, and 17-20 for graduate degrees. Get a frequency distribution for recoded <i>educ</i> and compare it to the frequency distribution for <i>degree</i>.</p> <p>Do a brief write-up (not handwritten) of the findings. Be sure to answer “what, why, and so what.”</p> <p>Read Chapters 3, 4, and 5</p> |

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| <p>Week 3<br/>Sept. 12</p> | <p>Page 116 (4.15 &amp; 4.16)</p> <p>Page 117 (4.18 &amp; 4.19)<br/>- Be sure to also do the optional exercises</p> <p>Read Chapters 5 &amp; 6</p>   |
| <p>Week 4<br/>Sept. 19</p> | <p>Compute Z scores for <i>educ</i>, <i>paeduc</i>, and <i>hrs1</i>. Use the <b>Case Summaries</b> procedure to display the normalized and “raw” scores for each variable for 10 random cases.</p> <p>Do a brief write-up (not handwritten) of the findings. Be sure to answer “what, why, and so what.”</p> <p>Use the <b>Graphs</b> command to graphically display <i>age</i> and then <i>zage</i>. How close are these charts to smooth, bell-shaped, normal curves?</p> <p>Page 158 (6.2)</p> <p>Label HSLs codebook</p>   |
| <p>Week 5<br/>Sept. 26</p> | <p>For this week’s homework, you’ll use data from the NELS, ELS, and HSLs.</p> <p>For BY2XCOMP (from NELS), BYTXCSTD (from ELS), and your own outcome variables (from HSLs) compare two racial groups, both genders, and the intersections<br/>((3 original variables + (8 groups x 3 variables) = 27 mean scores and st.dev.))</p> <p>Get univariate descriptive statistics for the 27 mean scores and st.dev. Produce an appropriate univariate table &amp; summarize findings/results <u>across time</u>.</p> <p>Do a brief write-up (not handwritten) of the findings. Be sure to answer “what, why, and so what.”</p> <p>Write a one-page proposal</p> <p>Read Chapter 9 &amp; 10</p> |

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| <p>Week 6<br/>Oct. 3</p>  | <p>Create a count variable for ‘college seeking behavior’ (HSLs’s: S1MOMTALKCLG, S1DADTALKCLG, S1FRNDTLKCLG, S1TCHTALKCLG, S1CNSLTLKCLG).</p> <p>Get univariate descriptive statistics for the summary scale (or composite). Produce an appropriate univariate table &amp; write a few sentences summarizing findings/results.</p> <p>Select and/or create appropriate variables to perform two <u>T-Test</u> procedures.</p> <p>Select and/or create appropriate variables to perform two <u>ANOVA with Post Hoc</u> procedures.</p> <p>Present <u>univariate</u> and <u>bivariate</u> results in a formatted table (see sample provided in class). Additionally, for all four, write a report describing the research question as well as the findings.</p> <p>Read Chapter 11 &amp; 13</p>   |
| <p>Week 7<br/>Oct. 17</p> | <p>Using the HSLs dataset, select about 15 variables (those with response categories ranging from 1 to 4).</p> <p>Identify and describe at least two possible composites – combination of at least four variables with the same underlying theme.</p> <p>Given those two composites, run at least two alphas each (for a total of four) to decide which combination of variables is statistically best for two (new) composite variables.</p> <p>Do a brief write-up (not handwritten) of the findings. Be sure to answer “what, why, and so what.”</p> <p style="text-align: center;">***</p> <p>Select and/or create appropriate variables to perform three <u>Chi-Square</u> procedures.</p> <p>Select and/or create appropriate variables to perform three <u>Pearson Correlation</u> procedures.</p> <p>Present <u>univariate</u> and <u>bivariate</u> results in a formatted table. Additionally, for all six, write a report describing the research question as well as the finding.</p> <p>Also, for the univariate table, be sure to include you two new composites and their Cronbach alphas.</p> <p>Read Chapter 15</p> |

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| <p>Week 8<br/>Oct. 24</p> | <p>Using HSLs, run three OLS regressions/models, such that a new ‘domain’ is added in each.</p> <p>The first model must have four independent variables (which must include race, gender, a measure of socioeconomic status, and a variable you choose) and an appropriate dependent variable (which you may choose).</p> <p>For the second model, add two more independent variables and write a brief narrative discussing the new variables as well as the changes in the old variables from Model I to Model II.</p> <p>Finally, run a third model, adding one more independent variable and write a brief narrative discussing the new variables as well as the changes in the old variables from Model I to Model II to Model III.</p> <p>Make <u>univariate</u> and <u>multivariate</u> tables look like the ones discussed in class.</p> <p style="text-align: center;">***</p> <p>Do 20 References<br/>- 10 using regressions<br/>- 10 using the ‘content’ of your choosing</p> |
| <p>Week 9<br/>Nov. 17</p> | <p>Using the templates provided in class AND the quantitative articles you read, do a complete “structure” of the final paper, with as much of it done as possible.</p> <p>More specifically, put the paper together with a reasonable attempt at the following:</p> <ol style="list-style-type: none"> <li>a. abstract</li> <li>b. introduction</li> <li>c. literature review &amp; theory development</li> <li>d. logic models</li> <li>e. data &amp; methods (completed)</li> <li>f. findings (completed)</li> <li>g. discussion/conclusions</li> <li>h. references</li> <li>i. tables (univariate, bivariate, and multivariate)</li> </ol> <p>As a reminder, the final paper must have at least eight regressions.</p>   |

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| Week 10<br>Nov. 14 | <p>Dichotomize your dependent variable and run three logistic regressions/models, such that a new 'domain' is added in each.</p> <p>For this assignment, use the SAME models you plan to use for your final paper.</p> <p>Make <u>univariate</u> and <u>multivariate</u> tables look like the ones discussed in class.</p> <p>Be careful with interpretation. Don't forget, these are logistic regressions and not OLS.</p> <p style="text-align: center;">***</p> <p>Work on a complete draft of paper.</p> <p>Complete draft (for blind review) is due, in its entirety and in the required structure, at the beginning of the next class session/meeting.</p> <p>Again, you will need:</p> <ol style="list-style-type: none"><li>a. abstract</li><li>b. introduction</li><li>c. literature review &amp; theory development</li><li>d. logic models</li><li>e. data &amp; methods</li><li>f. findings</li><li>g. discussion/conclusions</li><li>h. references</li><li>i. tables</li></ol> |
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| <p>Week 11<br/>Nov. 21</p> | <p>Do “blind” reviews of three of your colleagues’ papers.</p> <p>Three reviewers’ comments are due at the beginning of the next class session/meeting. The comments should be about 750 words long (~ three pages).</p> <p>Only one set of comments are needed for EACH paper reviewed.</p> <p>When reviewing papers, be sure to give specific suggestions to help your colleagues produce a better paper.</p> <p>As best you can, make your comments such that the author cannot figure out who the review is. Follow the format provided in class.</p> <p>In addition to your qualitative/written review of EACH paper, also provide a quantitative assessment for EACH paper.</p> <p>Using track changes, I also encourage you to make grammar/editorial corrections directly on the author’s electronic copy.</p> <p>Again, each review will have three components: the copyedited paper, the qualitative (written) review, and the quantitative assessment.</p> |
| <p>Week 12<br/>Nov. 28</p> | <p>Work on the final paper.</p> <p>Electronic copy of final paper is due at 4:15pmET on Tuesday (12/5) in my inbox.</p> <p>Submit one copy of a cover letter to the editor explicating how you incorporated the comments from the reviewers on this – the second – version of your paper (see sample provided in class).</p> <p style="text-align: center;">***</p> <p>Also, please do an (optional) course evaluation.</p> <p>You may structure it as you wish and share what you wish. No one will read it but me.</p> <p>However, if you’d like a structure, assume you had to teach this course next semester, what are three things you would change and what are three things you’d keep the same?</p>  |

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| <p>Week 13<br/>Dec. 5</p> | <p>Final paper is due today!</p> <p>Teach HLM<br/>(PPT slides)</p> <p>POSSIBILITIES:</p> <p>Social Movement Lecture<br/>(PPT slides)</p> <p>Capstone Lecture (PPT slides)</p> <ul style="list-style-type: none"> <li>- Favorite Books</li> <li>- Favorite Sentence</li> </ul> <p>End with Professional<br/>Development's Five Strategies</p> | <p>Final paper is due.</p> <p>I only need <u>one</u> PDF. It should include, first, the letter to the editor explicating how you incorporated the comments from the reviewers on the 1<sup>st</sup> version of your paper (see sample provided in class); and then second, the final paper.</p> <p>I will not return the final paper. Instead, if you want my comments on your final paper, please email me during the first two weeks of next semester.</p> <p style="text-align: center;">***</p> <p>Don't forget the (optional) course evaluation.</p> |
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