## Sociology 690 – Term Project

<u>Function</u>: The purpose of the this project is to provide you with a practical understanding of one or more of the four multivariate techniques discussed in class, and in your readings, through the experience of applying the technique to an existing data set of your choice

<u>Format:</u> The project will consist of four parts. The first will describe the research area in which you are interested and the hypotheses you have generated. The second will be a description of the dataset chosen and the variables contained therein, as they relate to your hypotheses. The third will describe the specific multivariate technique and the rationale for its use with these data. The fourth will run the analysis, in SPSS, using the dataset, and providing a summary of the results. The report should be no more than 5-10 pages, plus appendices and include the following:

- 1. <u>Research context and hypothesis:</u> You are to choose a research context with which you are familiar. Within that context, you are to describe two to three research articles that serve as the rationale for your choice of research question(s). Once established, describe how you would operationalize both the independent and dependent concepts and conclude with your research hypotheses.
- 2. <u>Dataset and variables</u>: You are to cull archives for the data available for secondary analysis. The source could be public, such as the U.S Bureau of the Census; quasipublic, such as ICPSR, or a private dataset that you may have access to or on which you are currently working. Your choice of data should be conditioned on the quality of the sample, the appropriateness of the variables for your research question(s) and the relevancy of the level of measurement for the chosen methodological technique. You will describe the original dataset and outline the operational definitions it contains for each of the variables in your hypotheses.
- 3. The Multivariate Technique: Choose the statistical technique that most closely maps your levels of measurement onto the independent and dependent variables. Be careful to describe both the rationale for the choice of technique and the procedure for its implementation. Do not focus on the mathematical underpinning. Rather, attempt to use an intuitive description of the technique in formulating this section. In the process, differentiate between your choice and the other variations on such analysis. For example, if you choose an ANOVA model, state which variation and why (ANCOVA, MANOVA, simple, factorial, etc.).
- 4. <u>Analysis and Results:</u> In this section of the report, begin by describing the input format, focusing on both the variable view and procedure submenu of SPSS. Use screen captures to illustrate the procedure and include them in your appendix. Next, discuss the results of the analysis by referring first to the hypotheses contained in section one above and then to the SPSS output, which should also be included in the appendix. Finally, draw a conclusion as to whether the research hypothesis is confirmed or not and how effective you believe your chosen technique was in analyzing the information.