**MUSI 8803/4843**

**Assignment 7: Statistics Planning**

Group #:

Group member names:

In this assignment, I would like you to work with your final project group members to carefully consider all the variables you will have, how you are measuring them, and what statistical tests you could use to evaluate your hypotheses.

1. (1 point) List all hypotheses that you still plan to test as a part of your final project:
2. (1 point). For each hypothesis, list an appropriate null hypothesis (note: this should relate to your statistical test).
3. (1 point). For each hypothesis, list what are you ultimately trying to demonstrate. (E.g., differences between groups on some variable? Relations between variables? Difference between a sample and a hypothetical population?)
4. (1 point) For each hypothesis, list what you believe to be the outcome variable(s) and predictor variable(s). Recall that in some cases it is possible to ‘flip’ the variables with no real damage to the outcome (e.g., with correlation or linear regression) and also that in some cases there may only be one variable observed with no independent variables.
5. (3 points) For each outcome and predictor variable(s), list:
   * what it is (e.g., counts, proportion, score, measurement, category, etc.)
   * whether it can/should be treated as discrete or continuous
   * what type of measurement scale it uses (e.g., interval, ratio, ordinal, nominal)
   * If the data collected is likely to fit a known distribution or not?
   * how many ‘levels’ it has (if appropriate).
6. (3 points) Based on your answers to the above questions, list all the possible statistical tests you *could* use to test each of your relevant hypotheses (including multiple tests if appropriate), and then decide amongst your group which test you think would be the best choice. Defend your choice.