

**Lab Assignment No. 6:**  
**Repeated Measures ANOVA and MANOVA Application**  
PSGA7816 Multivariate Statistical Analysis

In completing your assignment you are expected to be specific and analytical in your responses. This assignment is meant to evaluate if you are able to substantively use your analyses. Unlike for previous assignments the output for this homework will be provided in lab (or can be recreated using the syntax and data file). As opposed to working out statistical analyses this assignment aims for you to demonstrate that you can interpret and coherently discuss the analyses. Please **DO NOT** attach any output or syntax.

No e-mail submissions will be accepted. Late assignments will be penalized 2 points per day. The dataset for the assignment (copingscore.sas7bdat) will be e-mailed to students. Homework 6 is due **April 2, 2009 at 1:30 PM**.

**Data:** The data in copingscore.sas7bdat are a subset of young adults from a New York State high school. The particular school district the high school is in had to consolidate two other high schools into a single school. The two schools varied in their general educational focus. The Board of Education, which mandated that the new high school follow the same academic tracks as the other schools in the district, now wants to inquire how stressed the students in the new school are.

**Variables:** Two categorical variables are provided for the youth in this dataset. *Gender* codes for the sex of the youth (male = 0, and female = 1) as well *Track*, which codes for the academic track the student is in (Vocational Educational Training [VET] = 1, College Preparatory [CP] = 2, and Advanced Placement [AP] = 3).

The screening battery that is administered to every youth in this school is a measure that quantifies the stress interfering with the youths' coping. For this demonstration only the data for the students who were freshmen at the time of school fusion were selected (N = 249). The youth were assessed four times, at the beginning of their freshmen year (BASE), in the middle of their sophomore year (T1), junior year (T2) and senior year (T3).

**Hypotheses:** New York Board of Education is interested whether there are any significant differences in the coping mechanisms of students between different academic tracks. In particular, the Board believes that individuals in the *Vocational Educational Training* program would experience significantly greater amounts of stress as the time of graduation approaches because of their decision not to go to college.

**NOTE:** For this assignments you are asked to produce an **APA style paper** summarizing and thoroughly discussing your findings. Imagine that you are writing a report for an advisory committee that the Board of Education will be reviewing.