Summary of the linear regression component of Predict 410:

(1) Experienced the formulation of a typical data modeling project. Every data modeling project starts with some data and a rough problem, if you are lucky. Some data modeling projects start with less.

(2) Learned the foundations of the statistical modeling process through our three step modeling process: Exploratory Data Analysis, Model Identification, and Model Validation.
    a. Learned the difference between a data quality check and exploratory data analysis.
    b. Learned different ways to identify models – EDA versus variable selection methods.
    c. Learned the difference between validating models for statistical inference, predictive modeling, and business application.

(3) Learned the conceptual foundations and model assumptions of linear regression.

(4) Learned some data savvy – an important skill that cannot be learned by reading a text book.

(5) Learned a significant amount of extremely useful SAS.

Moving to multivariate analysis:

(1) Assignments will become more structured. Multivariate analysis has a need for more complicated mathematical notation, and hence we will focus on understanding the methods and applying the methods in SAS.

(2) Assignments will have more explicit SAS code. There are no really good SAS references for multivariate analysis. Hence, we will study multivariate analysis mostly in a tutorial mode where you are given SAS code and instructed to focus on interpreting the output.

(3) We will keep it simple, and we will focus on the basic application of our multivariate methods of interest.