MAT 222 — Spring 2017
Project Grade Scale

The final project is due at the start of class Monday May 1, 2017. Projects handed in after the beginning of class will be considered late. Remember, this project is worth 10% of your final grade. The project must meet all requirements and standards laid out by the project guidelines distributed and described in-class. Be sure you have read and understood these requirements. Each category will be graded on a 0–5 scale [0: missing, 1: Very Poor, 2: Poor 3: Fair, 4: Good, 5: Excellent]. The project will be graded on the following categories:

Dataset: The project should contain at least three quantitative variables, two categorical variables, and at least 30 observations. This 30 does not include observations which will be removed for various tests. All variables must be summarized in a table giving the 5-number summary, mean, and standard deviation for the variable. The unit of measurement for the variable must be given and any necessary explanation as to the variable meaning must be given. The method of data collection must be given the specific source described.

Grammar: The paper should be well-written, containing proper grammar. There should be no spelling errors, misuse of words, or incorrect use of punctuation. Be especially wary of run-on sentences. The paper should not be written from the first-person perspective. Sentences should vary and not be repetitive in language style or content. Each sentence/paragraph should clearly and concisely state its point. The project must include any references, cited appropriately in a bibliography and appear in the paper when needed.

Appearance: The paper should be presentable. The font size and style should be easily readable and not distracting. Table and figures should be centered and appropriately labeled. Equations and other mathematical symbols should be typeset differently than the rest of the text using appropriate math typesetting styles. Equations should be numbered and referenced properly. Minitab outputs should not be copied into the report but discussed in context in paragraphs or be formatted into a table. Any section/subsection titles should be appropriately placed, labeled, and appear with sensible titles. The report should come with appropriate title with the author appearing beneath it.

Statistical Tests: The project must include one multiple linear regression and confidence interval/hypothesis test. There should be *at least* two others analyses: t-test (one and two-sample), z-test for proportions (one and two-sample), chi-squared test, ANOVA (one or two-way), et cetera. The necessary assumptions for these tests should be stated and checked. When necessary, discussion of possible sources of error should be addressed. Null/Negative results are acceptable but there should be at least one significant result for the project. Graphs should be given only when appropriate and used effectively.

Analysis: The project must be understandable to those with minimal statistical knowledge. The data, variables, and statistical tests should be interpreted in the proper context. Results should be explained and placed into the context of the data set. Statements and conclusions should be clearly and concisely stated. Graphs should be given only when appropriate and used effectively. The results should be given in the introduction and conclusion. Any confidence intervals, hypothesis tests, or other analyses should be simply and correctly stated and their results interpreted. Assumptions for tests should be examined and checked.