**Final Project: Rubric**

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| **Final Project** | **4 = Complete** | **3 = Substantial** | **2 = Developing** | **1 = Minimal** |
| **Introduction** | * Describes the context of the research * Has a clearly stated question of interest * Clearly defines the parameter of interest and states correct hypotheses * Question of interest is of appropriate difficulty | * Introduces the context of the research and has a specific question of interest * Has correct parameter/ hypotheses OR has appropriate difficulty | * Introduces the context of the research and has a specific question of interest OR has question of interest and hypotheses | * Briefly describes the context of the research |
| **Data Collection** | * Method of data collection is clearly described * Includes appropriate randomization * Describes efforts to reduce bias, variability, confounding * Quantity of data collected is appropriate | * Method of data collection is clearly described * Some effort is made to incorporate principles of good data collection * Quantity of data is appropriate | * Method of data collection is described * Some effort is made to incorporate principles of good data collection | * Some evidence of data collection |
| **Graphs and Summary Statistics** | * Appropriate graphs are included * Graphs are neat, clearly labeled, and easy to compare * Appropriate summary statistics are included * Evidence for Ha and two explanations are provided | * Appropriate graphs and summary statistics are included * Graphs are neat, clearly labeled, and easy to compare or evidence for Ha is provided and discussed | * Graphs and summary statistics are included | * Graphs or summary statistics are included |
| **Analysis** | * Correct inference procedure is chosen * Use of inference procedure is justified * Test statistic, *P-*value and confidence interval are calculated correctly * *P-*value and confidence interval are interpreted correctly | * Correct inference procedure is chosen * Lacks justification, lacks interpretation, or makes a calculation error | * Correct inference procedure is chosen * Some calculations or interpretations are correct | * Inference procedure is attempted |
| **Conclusions** | * Uses *P-*value to correctly answer question of interest * Discusses what inferences are appropriate based on study design * Shows good evidence of critical reflection (discusses possible errors, limitations, etc.) | * Makes a correct conclusion * Discusses what inferences are appropriate * Shows some evidence of critical reflection | * Makes a partially correct conclusion (such as accepting null). * Shows some evidence of critical reflection | * Makes a conclusion |
| **Overall Presentation/ Communication** | * Clear, holistic understanding of the project * Poster is well organized, easy to read, and visually appealing * Statistical vocabulary is used correctly * Oral presentation is organized | * Clear, holistic understanding of the project * Statistical vocabulary is used correctly * Poster or oral is unorganized or has other problems | * Poster is not well done or communication is poor | * Communication and organization are very poor |

Note: A score of 0 is possible in each category.