

1 Deliverable 200 points total

1. Objective Clearly Stated [5]
2. Executive Summary States Basic Concept and Key Results [5]
3. Experimental Design and explanation of what that means [30]
 - Correct Identification of Design [5]
 - Correct Runs/Replicate Identified[5]
 - Advantages of this Design over FF[10]
 - Aliasing Issues Stated[5]
 - Resolution Properly Identified[5]
4. Narrative on why that Experimental Design was chosen [20]
5. Method of Data Collection and Randomization [10]
 - Method clearly stated [5]
 - Randomization issues addressed [5]
6. Collected Data [15]
 - Prima Facea Integrity Check [5]
 - Stared Data NOT inappropriately used in analysis [5]
 - Original Datasheet provided [or scan] [5]
7. Post Analysis [10]
 - Run Orders Included [5]
 - Other Assumptions Validated [5]
8. Analysis of the Experiment [include confidence intervals on coefficients] [80]
 - Proper use of R regression [15]
 - Appropriate Factor/Interaction Removal [10]
 - Coefficient Confidence Intervals Provided [5]
 - Initial Regression Model Output based on Experimental Design [10]
 - Final Regression Model Output [you can put interim ones in Appendices] [20]
 - Narrative of interaction removal justification [Engineering or Factor Principle used] [20]
9. Conclusions [25]
 - Best Design Factor Level Settings [5]
 - Total Costs [10]
 - Things you would have done differently if you had to do it again [5]
 - Challenges/Insights [5]