**Name:**

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| --- | --- | --- |
| **Applied Stats Individual Project Evaluation** | **Possible** | **Score** |
| **Introduction and motivation for the project – 8 pts** |  |  |
| Is the overarching question motivating the analysis clearly stated and explained? Are the specific questions this analysis will address clearly stated and explained? | 4 |  |
| Is relevant literature described and properly cited? Is the connection between the literature and this work made clear? | 4 |  |
| **Data – 13 pts** |  |  |
| Is the data source described and referenced? | 3 |  |
| Is each variable used in the analysis defined, including:   * descriptions of the levels for categorical variables * units for numerical variables | 6 |  |
| Are data preparation and cleaning procedures clearly described so that the study could be replicated by another researcher?  Is the handling of missing data/unusual observations/outliers described and is there sound rationale for it?  Is the initial and final number of observations in the analysis reported and are those that were removed accounted for? | 4 |  |
| **Statistical Analysis – 20 pts** |  |  |
| If necessary, were interactions and data transformations explored? Were these included in the model when appropriate? Were the conditions of the model checked, and were they met? | 10 |  |
| Was thoughtful variable selection employed to decide upon the final model? Was the final model compared with simpler options, and the form of the final model justified? | 10 |  |
| **Results – 20 pts** |  |  |
| Are descriptive statistics provided for key variables? Are they presented in a tabular form that is concise and informative? | 5 |  |
| Are results of modeling reported in appropriate tabular form with parameter estimates, standard errors, p-values, and confidence intervals? | 5 |  |
| Are parameter estimates and CIs correctly interpreted in the context of the research question? | 5 |  |
| How well are graphics/figures/equations presented? (axes labeled, captions, placement, readable, useful, add to content) | 5 |  |
| **Discussion – 21 pts** |  |  |
| Does the discussion begin with an accurate summary statement of the major findings of the analysis? Are R2 or misclassification rate reported (either here or in Results)? | 4 |  |
| Are the possible implications of the results discussed in the context of the research question? | 3 |  |
| Is there a thoughtful discussion of generalizability of the results? Are limitations of the study identified and is the potential impact on the conclusions stated? | 4 |  |
| Are strengths and weaknesses of the analysis identified, including a discussion of model conditions? | 4 |  |
| Are potential confounding variables discussed? | 3 |  |
| Are suggestions for future research identified and useful? | 3 |  |
| **Overall – Report – 18 pts** |  |  |
| Were research question(s) complex and insightful, demonstrating understanding of the research topic? | 6 |  |
| How well does the author demonstrate an understanding of the statistics? Are statements and conclusions accurate? | 6 |  |
| How well-written is the report (e.g., correct grammar, spelling, etc.)? | 6 |  |
| **(Tentative) Total** | **100** |  |
| **Supporting Materials (points to be deleted)** |  |  |
| Bibliography included; citations are stylistically consistent. | -3 |  |
| Title and author appropriately identified  Paper follows formatting guidelines (1.5 spacing, 8 page max, etc.) | -5 |  |
| **Grand Total** |  |  |