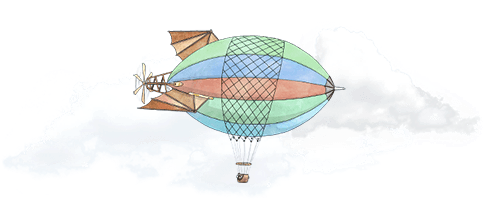
**Math 58B: Rubric**

**The Islands Activity[[1]](#footnote-1)**



|  |
| --- |
| The information below is to provide a rubric for the overall Islands research project. |

You will now begin to work in your project groups of approximately 3 people. If you have a group already, great, let me know! If you do not have a group, please let me know that you’d like me to put you in a group. You must complete this assignment with the same people who will be in your final Island project group.

Reminder for logging on: Go to the Islands (<https://theislands.umn.edu/login.php>). If you have forgotten your password, click on ‘Need to set or reset your password?’, enter your 5C email address (most likely of the form aaaa20xx@mymail.pomona.edu), and the Islands will resend your password to you. Let me know if you cannot access the Islands.

Note: The Visitor Center on the Islands (click on the square just south of Arcadia) is a great source for information about the Islands.

Don’t forget about the **Academy**. What is there? Are there any studies that seem interesting? Is the response variable quantitative or categorical? How many explanatory variables are there? Are they each quantitative or categorical? How many observational units total were collected in the study?

**FINAL REPORTS / OUTCOMES**

3/28/23: **Pilot Study** -- research question, methods section, preliminary data

4/4/23: **Power Analysis** – calculation of sample size from the Pilot data

4/18/23: **Preliminary Data Analysis** -- data summaries / visualizations, first draft of analysis, including regression

5/2/23: **Complete Draft** – including multiple regression

5/4 + 12/23: **Presentation** -- 2 slides, 5 min presentation (either during our final time or during reading days)

5/12/23: **Final** (edited) **Project**

**EVALUATION OF FINAL ISLAND RESEARCH PROJECT**

**Grading Scheme for the research project**

* **40% Final Project**
* **30% Interim assignments / complete / detailed**
* **10% Presentation**
* **15% Individual reflection**
* **5% Group assessment**

## Introduction (+10 pts)

The introduction should include:

* Brief background (Has an explanation been given for why the research was done? Why is the work important? What is its relevance?)
* Objective or Research question (Is the brief description of the hypothesis/goals and findings of the paper clearly stated for the reader?)

## Methods (+20 pts)

Methods should include description of:

* Study design (enough info for someone to replicate)
* Sampling method and eligibility criteria
* Treatment (i.e., explanatory variable)
* Outcome definition(s) (i.e., response variable)
* Sample size justification
* Statistical methods which were applied

## Results (+40 pts)

Results should communicate / describe / summarize:

* Baseline data (including numbers analyzed – explain the explanatory variables, summarize the explanatory variables, plot the explanatory variables, etc.)
* Outcomes (explain, summarize, plot the response variable). Will the treatment do harm?
* Each model is completely described
* Each figure / table is completely described
* Connections between analyses, e.g., between figures and model results
* Discussion
* Conclusion (i.e., answer to the research question), interpretation
* Limitations
* Ideas for future studies

## Coverage, Clarity (+30 pts)

Full analysis should be clear, concise, well-organized, reproducible, and engaging:

* Dataset is complete, available, tidy (rows are observations, columns are variables)
* All information was provided
* Presentation was organized
* Presentation was clear, understandable
* Tables and figures were used well (axes labeled, etc.)
* Work is completely reproducible (the instructor must be able to run the .Rmd file)

1. Thanks to Laura Le and Ann Brearley at UMN for sharing resources. Much of the assignment is taken directly from their excellent resources. [↑](#footnote-ref-1)