

MAR 536: Biological Statistics II, Spring 2025

Project Paper Rubric

I. Introduction (15 points)

- Clearly state the research questions or objectives
- Provide a brief background on the problem or area of research
- Describe the data set and its source

II. Methods (25 points)

- Describe the statistical methods used, including any assumptions and limitations
- Provide a justification for the statistical methods applied
- Describe how the data were analyzed, including any pre-processing steps
- Provide a description of any models used and how they were validated

III. Results (40 points)

- Present the results of the analysis in a clear and concise manner
- Use appropriate tables and figures to display the results
- Include relevant statistical diagnostics or model validation results
- Describe results of model selection procedures where relevant
- Provide clear explanation of the findings of the results, including interpretation of estimated model coefficients, variables, and/or test statistics.

IV. Discussion (20 points)

- Interpret the results of the analysis in the context of the research question
- Discuss the limitations of the study and potential sources of bias
- Discuss the implications of the findings and suggest areas for further work
- Provide a conclusion that summarizes the main findings of the study

General Requirements:

- The text of the paper should be no more than 8 pages long (excluding references)
- The paper should be written in a scientific style, with appropriate citations and referencing, ie in the form of a manuscript for a journal publication
- The paper should be well-organized, with clear headings and subheadings
- The paper should be free of grammatical and spelling errors
- The paper should demonstrate a strong understanding of statistical methods and their application to biological data sets.