Final Project Grading Rubric

Criteria	Points
Study Background Presenter details (in 1-2 slides) the necessary background and motivations for their chosen study. Include the specific biological questions being raised/asked and how this study attempts to address them.	5 pts
Description of dataset generation & published results Presenter details the methods and approaches used to generate the genomics dataset used in this study. (1-2 slides). This should include a description of the samples, sample source materials, how they were processed, what materials were extracted, how any sequencing libraries were prepared, and how these data were analyzed/processed by the original authors. Presenter should also explicitly define/describe the experimental design for any comparisons or integrative analyses used in the original study.	5 pts
Reproduction of prior results Presenter attempts to reproduce 1-2 main figure results from the original study. This can be using reproducible code provided by the original authors, or with original code developed by the presenter. Presenter will be evaluated on 1) their ability to reproduce 'the intent' of the result even if it is not exact or produces a different outcome, 2) their ability to describe specific roadblocks or other issues that make their study more difficult to reproduce, and 3) clear demonstration of an effort to address, circumvent, or otherwise account for roadblocks in reproduction. WE ARE NOT GRADING ON ACCURACY OF THE REPRODUCTION, simply a demonstration that a good faith effort to perform a similar analysis has been made.	5 pts
Description of challenges associated with reproduction of original results Presenter demonstrates understanding of the specific obstacles associated with reproduction of their study. This can include data availability, annotation differences, subjective interpretations, unknown parameters, and/or missing data or accessory files as examples. Presenter should make a direct comparison to the published results and describe what specific differences they observed and why (or why not).	5 pts
Novel Analysis/interpretation of dataset Presenter attempts to derive a novel analysis or interpretation of the datasets in their chosen study. Presenter should aim to make a conclusion based on their novel analysis.	5 pts
Demonstration of logical workflow progression and appropriate use of software tools Presenter displays a strong understanding of the logical workflow for their novel analylsis including describing where/how this deviates from the published study workflows. Presenter is able to detail and defend their choise of software tools and choices in their chosen workflow.	5 pts
Presentation quality Presentation should be logically organized, sufficiently detailed, demonstrate clarity and coherence of thought, and effective use of images/figures. Pressenter speaks claearly and demonstrates understanding and familiarity with the presented material.	5 pts
Project Code Submission All project code and related materials (with the exception of raw data or other large files) should be packaged up, or deposited in an accessible repository, and submitted prior to 12/18/22. The code should be interpretable and well documented for review.	5 pts
Total Points	40 pts