ECE 598RE: Preliminary Report Grading Rubric

Total Points: 15% of Final Grade

The purpose of this rubric is to provide clear, actionable feedback on your progress. It is designed to reward rigorous scientific thinking, clear communication, and intellectual honesty.

1. Scientific Narrative & Framing (4 points)

Excellent (4 pts): The abstract and introduction crisply articulate a testable hypothesis. The motivation is compelling, clearly situating the work within a broader context and connecting it logically to the initial project plan.

Good (3 pts): The hypothesis is clearly stated and the motivation is present, but could be sharpened. The connection to the project plan is clear.

Satisfactory (2 pts): The hypothesis is present but may be vague or difficult to test. The motivation is unclear or overly generic.

Needs Improvement (0-1 pts): A clear hypothesis or motivation is missing. The report reads like a list of actions without a guiding scientific question.

2. Key Figure & Scientific Analysis (5 points)

Excellent (5 pts): The figure is clear, well-labeled, and directly addresses the core hypothesis. The analysis presented in the caption and text is rigorous and intellectually honest, thoughtfully interpreting the result (whether positive, negative, or null). The caption is self-contained and provides sufficient detail for an expert to understand the plot.

Good (3-4 pts): The figure is mostly clear and relevant to the hypothesis. The analysis is present but could be deeper or more critical. The interpretation is reasonable.

Satisfactory (2 pts): The figure is difficult to interpret (e.g., missing labels, confusing axes) or the analysis is superficial and purely descriptive. A clear link to the hypothesis is missing.

Needs Improvement (0-1 pts): The figure is irrelevant, missing, or the analysis is absent. The result appears to be unvalidated or presented without critical thought.

3. Reproducibility & Code Quality (3 points)

Excellent (3 pts): The submitted code is well-commented, runs without errors, and perfectly reproduces the figure(s). The logic is easy to follow, demonstrating a clear command of the implementation.

Good (2 pts): The code runs and produces the figure, but may require minor tweaks or is difficult to follow. It fulfills the reproducibility requirement but could benefit from better organization or commenting.

Satisfactory (1 pt): Code is submitted but has significant errors, is missing key dependencies, or is so poorly documented that it cannot be run without major effort.

Needs Improvement (0 pts): Code is missing or non-functional.

4. Overall Progress & Project Trajectory (3 points)

Excellent (3 pts): Demonstrates significant and thoughtful progress since the project plan. The project is on a clear and promising trajectory, even if—and especially if—this involved a well-justified pivot to a diagnostic Plan B.

Good (2 pts): Shows reasonable and expected progress. The project is clearly moving forward and on track to meet the final goals.

Satisfactory (1 pt): Progress appears limited. It's unclear if the initial milestone has been fully achieved, and the path to the final report seems uncertain.

Needs Improvement (0 pts): Little to no progress has been demonstrated since the initial project plan was submitted. (Note: This is a flag for me to reach out and help you get unstuck).