BIOL 1114 Planning Form Grading Rubric

Question	Pts Poss.	All pts poss.	¾ of pts poss.	½ of pts poss.	¼ of pts poss.	No points
Describe the observations….	**1**	Most or all the relevant observations are noted and referenced to the question asked.	Most or all the relevant observations are noted, but there is no reference to the question asked.	Half the relevant observations or fewer are noted and there is reference to the question asked.	Fewer than half the relevant observations are noted and there is no reference to the question asked.	None of the relevant observations are noted and there is no reference to the question asked.
Hypothesis	**4**	Hypothesis is a **(1) causal explanation** addressing the question asked AND is **(2)** relevant with regard to observations in the background information, **(3)** reflects an understanding of related theories, **(4) is testable** in lab, and **(5)** leads to clear predictions that clearly support the stated hypothesis and refute others.	Hypothesis is a **causal explanation** addressing the question asked and addresses **any 3** of the remaining 4 components.	Contains **any 3** of the 5 components.	Contains **any 2** of the 5 components.	Hypothesis is not **a causal explanation** addressing the question asked, reflects **no** understanding of related theories, **is not testable** in lab, provides **no** explanation for the observations in the background information and **does not** lead to clear predictions that support the stated hypothesis and refute others.
Experiment Outline	**2**	The experimental and control groups are clearly outlined. Methods for collecting data include all the relevant steps for the investigation. (equipment, interval, method and duration of sampling) Dependent and Independent variables are correctly identified and an appropriate graph is drawn.	Intermediate performance	Either the experimental or control group is not appropriate and the methods for collecting data are incomplete AND Either the Dependent and Independent variables are incorrectly identified or mislabeled on the graph or no graph is present.	Intermediate performance	The experimental and control groups are **not** defined. **No** data collection methods are given. The dependent and independent variables are **not** identified and **no** graph is drawn **OR** experiment is not a viable approach for the lab (for example, bringing large mammals into the laboratory for observation)
Predictions	**1**	Student articulates the possible outcomes (support **and** refute) of the experiment he/she designed and constructs appropriate IF…, then…. statements.	Not Available	Student articulates one possible outcome of the experiment designed.	Not Available	Possible outcomes given do not match the experiment designed or no predictions are made.
Preparation Checklist (These are very specific questions related to the students' understanding of the methods to be used for data collection.)	**2**	All the questions are answered correctly.	Intermediate performance	½ of the correct information is supplied.	Intermediate performance	None of the questions are answered correctly.

…and remember, cheatin' ain't the cowboy way!