Lab Design and Preparation Rubric: SBI4U Culminating Day 1

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| Category | Level 4 | Level 3 | Level 2 | Level 1 |
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| **Purpose** | The purpose of the lab is  clearly identified and stated using an appropriate statement. | The purpose of the lab is identified, but is stated in a somewhat unclear  manner. | The purpose of the lab is partially identified, and is stated in a somewhat unclear manner. | The purpose of the lab is not relevant to the lab. |
| **Hypothesis** | Hypothesized relationship  between the variables and the predicted results is  clear and reasonable. In the proper “If…then….because…” format. | Hypothesized relationship  between the variables and the predicted results is reasonable based on general knowledge and observations. In the proper “If…then….because…” format. | Hypothesized relationship  between the variables and the predicted results has been stated, but appears to be based on flawed logic. Not in proper  “If…then….because…” format. | Hypothesized relationship is not related to the purpose of the investigation. |
| **Materials** | All materials and setup used in the experiment are clearly and accurately  described, using qualitative & quantitative measures. | Almost all materials and the setup used in the  experiment are clearly and accurately described, using qualitative & quantitative measures. | Some of the materials and the setup using some qualitative & quantitative measures. | Many materials are described  inaccurately OR are not described at all. |
| **Safety** | All Lab Safety Protocols have been identified and are clearly and accurately addressed in both the materials & procedure and separate safety section. | Almost all Lab Safety Protocols have been identified and are clearly and accurately addressed in both the materials & procedure and separate safety section. | Some Lab Safety Protocols have been identified and are clearly and accurately addressed in some/any of materials list, procedure &/or separate safety section. | Very Few Lab Safety Protocols have been identified and are not clearly and accurately addressed in some/any of materials list, procedure &/or separate safety section. |
| **Variables (2X)** | All Independent/Dependent and Controlled Variables are clearly and accurately identified | Almost all Independent/Dependent and Controlled Variables are clearly and accurately identified | Some Independent/Dependent and Controlled Variables are clearly and accurately identified | Very Few Independent/Dependent and Controlled Variables are clearly and accurately identified |
| **Procedure-design (2X)** | Procedure is designed in a clear, concise and logical order that can be followed safely, minimizing materials used | Procedure is designed in a clear and logical order that can be followed safely | Procedure is designed in a somewhat logical order that can be followed with some difficulty. Some safety included | Procedure is not designed in a concise and/or logical order. Safety precautions may/may not be present |
| **Procedure-communication of it (2X)** | Procedure is presented in the proper format practiced throughout the semester, using pictures while minimizing words | Procedure is presented in proper format as practiced throughout the semester | Procedure is presented minimally following the proper format practiced throughout the semester | Procedure is not presented in the proper format practiced throughout the semester. |
| **Observation Table**  **(2X)** | Table is designed to contain all required and relevant information and is presented in a neat and logical format as practiced throughout the semester. | Table is designed to contain all required and relevant information but is not presented in a neat and logical format as practiced throughout the semester. | Table is designed to contain some of the required and relevant information and is not presented in a neat and logical format | Table contains few of the required and relevant information and is not presented in a neat and logical format. |
| **Predicted Obs** | Predictions are relevant and accurate to the designed procedure | Predictions are mostly relevant and accurate to the designed procedure | Predictions are somewhat relevant but not relevant to the designed procedure | Predictions are not related to the designed procedure |