**Research Project Proposal Rubric**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attributes** | **Below Standard (0)** | **Approaching Standard (1)** | **At Standard (2)** | **Above Standard (3)** | **Score** |
| **Title** | No title is specified, it is written in the form of a question, or the title has no connection to the planned experiment. | The title is appropriate to the planned experiment but the independent and dependent variables are unclear. | The title is written as a statement that informs the reader of the independent and dependent variable. Scientific names of organisms and/or chemical procedures are mentioned (if applicable). | The title is written as a concise, descriptive statement that informs the reader of the independent and dependent variable. Scientific names of organisms and/or chemical procedures are mentioned (if applicable). |  |
| **Introduction** | The problem or topic is not defined or is unclear. No reason for study is mentioned nor is mention made of how they are addressing the problem or how they plan to find a solution. Personal pronouns are used. | The problem or topic is defined and the reason for study is mentioned. No explanation of how the author is addressing the problem or attempting to find a solution is included. Personal pronouns are used. | The problem or topic is defined and the reason for study is mentioned. The author explains how they are addressing the problem and how they plan to find a solution. No personal pronouns are used. | The problem or topic is clearly defined and the reason for study is made explicit. The author makes frequent use of background information to explain how they are addressing the problem and how they plan to find a solution. No personal pronouns are used. |  |
| **Experimental Design Table** | No experimental design table is included or it is incomplete or filled out incorrectly. | The experimental design table is present and contains the independent variable, dependent variable, and controlled variables but the control and experimental groups are not evident or unclear. Scientific names and chemical procedures are not specified (but should be). Background questions are not listed or are not complete. | The experimental design table is present and contains the independent variable, the dependent variable (broken into quantitative and qualitative categories, if applicable), controlled variables, and appropriate control and experimental groups. Scientific names and chemical procedures are specified (as appropriate). Background questions are listed. | The experimental design table provides exceptional clarity regarding the author’s planned experiment with regard to independent, dependent (broken into quantitative and qualitative categories, if applicable), and controlled variables as well as the control and experimental groups. Scientific names and chemical procedures are specified (as appropriate). A thorough list of background questions is included. |  |
| **Hypothesis** | The hypothesis is not included or it does not clarify the independent and dependent variable. | A hypothesis is included that mentions the independent variable and dependent variable but does not elaborate on the relationship between them or the effect of the independent variable on the dependent variable. | The approved hypothesis is included. It specifies the independent variable, the dependent variable, the relationship between the variables, as well as the predicted effect of the independent variable on the dependent variable. | The approved hypothesis is included and elaborated upon to include the predicted effect of the independent variable on the dependent variable as well as a statement of data to be collected. |  |
| **Materials** | No materials are listed. | Materials are listed but are inadequate to perform the planned experiment. The required supplies, consumables, tools, and instruments are unclear. | The materials listed are adequate to perform the planned experiment and include the required supplies, consumables, tools, and instruments. Other applicable information (such as chemical concentrations, scientific names, characteristics of organism, etc.) is included. | All required supplies, consumables, tools, and instruments are listed along with their exact technical specifications and amounts (in metric units). Other applicable information (such as chemical concentrations, scientific names, characteristics of organisms, etc.) is included. |  |
| **Methods** | No methods are proposed. | Methods are proposed but are inadequate to perform the planned experiment. There is no introductory paragraph discussing experimental set-up and what is done on Day 1 and what is repeated is not included or inadequately explained. The frequency and manner of data collection and number of trials is unclear. | Methods adequate to perform the planned experiment are proposed and are written clearly enough that another reader would be able to replicate the experiment. An introductory paragraph discussing experimental set-up is present and what is done on Day 1 and is repeated is explained. The frequency and manner of data collection and the number of trials is evident. It is written in narrative form. | The methods section includes a detailed discussion of the experimental set-up including the numbers of entities being studied, how they will be labeled and organized, and all the items and tools used. Another reader would easily be able to replicate the experiment. What is done on Day 1 and is repeated is fully explained. The frequency and manner of data collection, the number of trials, and the overall length of the experiment is explained. It is written in narrative form. |  |
| **Formatting** | There are no headings for each section; the proposal is not typed | Each section has a labeled heading; the proposal is not typed. | Each section has a labeled heading that is centered; the proposal is typed. | Each section’s heading is labeled and the label is centered and is not italicized, underlined, written in all caps, or bolded; the proposal is typed in Times New Roman or Arial font and 12-point type. |  |
| **Sentence structure, grammar, mechanics, and spelling** | Sentences sound awkward, are distractingly repetitive, or are difficult to understand. The author makes numerous errors in grammar, mechanics, and/or spelling that interfere with understanding | Most sentences are well-constructed. The author makes several errors in grammar, mechanics, and/or spelling. | Most sentences are well-constructed. Errors in grammar, mechanics, and/or spelling are rare. | All sentences are well-constructed. There are no errors in grammar, mechanics, and/or spelling. |  |
| **Score Total** | | | | |  |