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| **CATEGORY** | **4 - Superior** | **3 - Good** | **2 - Progress** | **1- Basic** | **Score** |
| **Research Paper** |
| Title | Concise, less than 15 words, clearly summarizes the project. | Less than 25 words and relates to the project. | Title is somewhat related to the project. | Title is unrelated to the project. |  |
| Abstract | (<1 page) Clear summary of the project includes all elements: background, objectives, research question, methods, results and conclusion.  | (<1 page) Summarizes project and includes most of the elements: background, objectives, research question, methods, results and conclusion. | (>1 page) Summarizes the project and includes some of the elements: background, objectives, research question, methods, results and conclusion. | (>1 page) Unclear summary of project and missing most of the elements: background, objectives, research question, methods, results and conclusion. |  |
| Introduction | (1-2 pages) Includes review of what you already know about this project, states project importance, cites 3 or more related studies, including one from a “peer-reviewed” journal. | (1-2 pages) Includes some background information related to this project, states project importance, and cites 2 related studies, including one from a “peer-reviewed” journal. | (1-2 pages) Includes some background information related to this project, states project importance, cites 1-2 related studies. | (1-2 pages) Includes some background information related to this project, may refer to importance of the project, citation of a related study may or may not be included. |  |
| Research Question/ Hypothesis | Original question(s) are answerable through research; includes a well-written, testable, and measurable hypothesis.  | Original question(s) are likely answerable through research; includes a testable and measurable hypothesis. | Stated question(s) may be answerable through research; hypothesis included. | Research question(s) and/or hypothesis statement is vague and/or missing. |  |
| Research Methods | (2-4 pages) Clearly describes the methods used for research investigation, the preparation of materials/equipment (including instrument calibration), the process used for data collection, and all related calculations. | (2-4 pages) Describes the methods used for planning the research investigation, the preparation of materials/equipment, the process used for data collection, and one or more related math calculations. | (<2 pages) Describes some methods used for planning the research investigation, may describe the preparation of some materials/equipment, no reference to related math calculations. | (<2 pages) Methods used for planning the research investigation are unclear or missing, no reference to related math calculations. |  |
| Results | (2-3 pages) Results are clearly stated, analysis of data addresses the research question(s), and patterns/trends in data are shown using tables, figures and/or graphs. | (2-3 pages) Results are stated, analysis of data addresses the research question(s), and possible patterns/trends in data are inferred. | (<2 pages) Some results are presented and analysis of data may or may not address the research question(s). | (<1 page) Some results are presented and data may or may not address the research question(s). |  |
| Discussion | Restates the meaning of the most important results, explains the importance, relevance and impact on research, as well as how and why the results help answer the research question(s). Hypothesis is addressed as supported or refuted. Results are compared with similar studies.  | Restates the most important results, explains the importance, relevance and impact on research. Hypothesis is addressed as supported or refuted. Results are compared with similar studies.  | Results are restated and comments are made about the relevance and impact on research. Hypothesis is addressed as supported or refuted. Results are compared with similar studies.  | Results are restated at some level. Hypothesis may or may not be addressed as supported or refuted. Results may or may not be compared with similar studies. |  |
| Conclusion(s) | State and support conclusion(s) using results, discusses implications for future research including improvements that could be made to existing methods. | State and support conclusion(s) using results, discusses implications for future research, possibly including improvements that could be made to existing methods. | State and support conclusion(s), possibly using results, discusses implications for future research, possibly including improvements that could be made to existing methods. | Conclusion(s) stated but may or may not be supported using results. May or may not mention implications for future research, or improvements to existing methods. |  |
| Bibliography | Includes all works cited in APA format: <https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html> | Includes all works cited in APA format: <https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html> | Includes all works cited in APA format: <https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html> | Works cited are incomplete and/or missing. |  |

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| **CATEGORY** | **4 - Superior** | **3 - Good** | **2 - Progress** | **1- Basic** | **Score** |
| **Research Presentation** |  |
|  | Presentation is 10-15 minutes long. Student clearly states the purpose of the project being presented, along with an effective introduction and conclusion. Presentation message is tailored to the audience. Speaker maintains eye contact throughout presentation. | Presentation is 10-15 minutes long, Student states the purpose of the project being presented. Presentation message is appropriate for the audience. Speaker does not read from slides during the presentation. | Presentation is less than 10 or more than 15 minutes. The purpose of the project being presented is unclear. Speaker reads directly from notes/slides during the presentation. | Presentation is less than 10 or more than 15 minutes, Speaker is unprepared. |  |
| **Exhibit Poster** |  |
|  | Visually appealing. Includes summary of all elements from the research paper. All photos, charts, tables, etc. include titles and dates.  | Includes summary of all elements from the research paper. All photos, charts, tables, etc. include titles. | Elements of the research paper are missing. Some photos, charts, tables, etc. include titles. | Exhibit poster is unfinished or missing. Few or no photos, charts, tables, etc. include titles. |  |
| **Post Symposium Student Reflection** |  |
|  | Student addresses and answers all comments and questions raised during their presentation in a clear and organized manner. Student describes implications for future research that could be done to follow their research.  | Student addresses most comments and questions raised during their presentation. Student mentions possible projects that could be done next to follow their research. | Student acknowledges most comments and questions raised during their presentation. | Student refuses to address any comments or questions raised during their presentation. |  |