2023 UNDERGRADUATE RESEARCH FAIR AND EXHIBITION

PENN STATE SCRANTON

**Judging for Theoretical Research Projects**

*The following criteria apply to research projects in non-applied mathematics (such as the proof of a theorem). If the project involves math, but the math is used to analyze data, use the Empirical Research judging form instead.*

**Poster Judging Criteria**

The purpose of a poster exhibit is to convey to a wide audience a research project's significance to scholars in the field and its potential significance to the general public. Exhibits will be judged on their quality in four areas:

**1) Content -** The exhibit must include:

 A short title of the project

 Student name (or names, if more than one student is presenting the exhibit)

 Collaborators, adviser(s), and department(s)

 Funding sources (if applicable)

 Project motivation or objectives

 Significance to the field and society in general

 A solution to the problem and evidence/explanation of how it solves the problem

 Discussion of implications, limitations, and directions for future research

 Documentation of sources used for the project through the use of references.

**2) Display -** The core of each exhibit is a poster with text and graphics intended for a general audience.

 Poster should attract attention and convey important information about the project.

 Language should be simple and descriptions brief. Excessive jargon should be avoided; necessary technical terms should be defined.

 Spelling and grammar must be correct.

 Photographs, drawings, charts, tables, or graphs should be simple, well organized, and carefully chosen when used to explain complicated technical concepts to a wide audience.

 Poster should not exceed 3 feet in width and 4 feet in height (max 36” x 48”)

**3) Oral Presentation -** Each student should prepare to describe and discuss his or her exhibit, tailored

specifically to make the work understandable to a non-expert audience.

**4) Thoroughness**

 Does the project exhibit a thorough investigation of the topic?

 Are there indications of original, critical thought?

* All in all, does the project show creativity?

**Undergraduate Research Fair and Exhibition – Theoretical Research Judging Rubric**

**Project Title:**

**Judge’s Name: First Author:**

**ASSIGN EACH INDIVIDUAL LETTERED ITEM IN EACH AREA FOR A CATEGORY SUBTOTAL, WHERE:**

**0 = Not Present 1 = Poor 2 = Average 3 = Very Good 4 = Excellent**

**1) CONTENT:**

|  |  |
| --- | --- |
| **Score** | **Rate the student’s poster content on the following:** |
|  | a. The title is specific and informative and all collaborators are acknowledged. |
|  | b. Scholarly sources were used and integrated effectively in the project. |
|  | c. All sources are cited in the text and in a Works Cited section. |
|  | d. The problem and/or motivation are clearly stated. |
|  | e. The significance to the field and to society is clearly stated. |
|  | f. The poster clearly explains the solution to the problem. |
|  | g. The poster provides adequate evidence on the validity of the solution. |
|  | h. The poster effectively links findings to original research problem. |
|  | i. The poster contains a clear discussion of implications and limitations of findings, and future directions. |
|  | **1. Total Score for Content (add the scores for items a-i) (maximum possible for section = 36)** |

1. **DISPLAY:**

|  |  |
| --- | --- |
| **Score** | **Rate the poster’s visual appeal on the following:** |
|  | a. The exhibit attracts attention and is creative and visually interesting. |
|  | b The text conveys written information in a clear and concise manner, with no spelling and few grammatical errors. |
|  | c. Terms are clearly defined. |
|  | d Photographs, drawings, charts, tables, or graphs are well organized, understandable, and explain relevant concepts  to a wide audience. |
|  | **2. Total Score for Display (add the scores for items a-d) (maximum possible for section = 16)** |

1. **ORAL PRESENTATION:**

|  |  |
| --- | --- |
| **Score** | **Rate the presenter (s) on the oral presentation based on:** |
|  | a The presenter(s) was/were self-confident, professional, and knowledgeable about the research and information being presented. |
|  | b. The presentation is understandable to a general audience. |
|  | c. The major points of the research were discussed in the oral presentation. |
|  | **3. Total Score for Oral Presentation (add the scores for items a-c) (maximum possible for section = 12)** |

1. **THOROUGHNESS:**

|  |  |
| --- | --- |
| **Score** | **Rate the presenter (s) on the oral presentation based on:** |
|  | a The topic is thoroughly investigated |
|  | b. There are indications that original, critical thought went into the work |
|  | c The project shows creativity |
|  | **4. Total Score for Thoroughness (add the scores for items a-c) (maximum possible for section = 12)** |

|  |  |
| --- | --- |
|  | **Grand Total - Add Items in the shaded area numbered 1 – 4 from above (Maximum possible = 76)** |