Rubric for Oral Presentation of Research (40 points) and Data Analysis (20 points)
Read other handouts to help in your preparation of your presentation!

<table>
<thead>
<tr>
<th>Scientific Sections</th>
<th>Poor 0-2 points</th>
<th>Satisfactory 3-4 points</th>
<th>Excellent 5 points</th>
<th>POINTS</th>
</tr>
</thead>
</table>
| **Introduction**    | - No clear hypothesis  
                      - Insufficient background information  
                      - Not clear why the research was done | - Good statement of hypothesis  
                      - Provides some background information  
                      - Explains the research project but doesn't provide information as to how it relates to previous studies. | - Clearly stated hypothesis  
                      - Provides well-researched background information that  
                      - Explains why topic studied, and how study fits into previous research. |        |
| **Experimental Design** | - Inadequate description of methods used to conduct study  
                      - Controls and replicates are not clearly indicated  
                      - Experimental design doesn't address the hypothesis. | - Good description of methods used to conduct study, BUT  
                      - Leaves out key information to allow someone to perform the experiment themselves OR  
                      - Presented as a highly detailed check-list.  
                      - Indicates study controls and number of replicates  
                      - Design adequately addresses the hypothesis. | - Includes and expands on all of the items in “Satisfactory” category  
                      - Description of methods is concise  
                      - Viewer/Listener can easily determine how to do the experiment themselves.  
                      - Design directly addresses the hypothesis. |        |
| **Results** | - Inadequate descriptions of results  
                      - Figures not labeled clearly OR  
                      - Data not presented appropriately. | - Data is accurately presented, but in need of some revision.  
                      - Adequate explanation of the figures/data presented. | - Data is accurately presented in a suitable format,  
                      - All data correctly titled and labeled,  
                      - Data is easy to interpret, and relevant to the purpose.  
                      - Figures clear and easy to understand. |        |
| **Analysis** [Total possible points: 20 (multiply this category by 4 to determine total)] | - Analysis of collected data is not valid and is incomplete, OR  
                      - Inaccurate conclusions are drawn.  
                      - Lack of any summary statistical analysis. (Review the data analysis handout for a description of summary statistics) | - Some conclusions are not fully supported by the data. OR  
                      - Data is evaluated and valid but incomplete conclusions are drawn.  
                      - Summary statistics performed, but incomplete or inaccurate. | - Data clearly support all conclusions.  
                      - Data is evaluated using appropriate methods and valid conclusions are drawn.  
                      - Summary statistics performed in an appropriate manner consistent with the purpose of the experiment. | \( \text{____} \times 4 = \text{total for row (____)} \)
| **Discussion/Conclusions** | - Inadequate discussion of significance of results, and how they apply to the hypothesis.  
                      - Didn’t address potential problems with study and/or suggest ways in which it could be improved.  
                      - Did not sufficiently state additional research questions that could be the subject of future studies. | - Good discussion of significance of results and how they apply to the hypothesis.  
                      - Proposes potential problems with study but doesn’t suggest ways in which it could be improved.  
                      - Suggests future studies but doesn’t explain how the future studies would add to the current experiments. | - Excellent discussion of significance of results in terms of the hypothesis tested.  
                      - Clearly addresses potential problems and suggests ways in which study could be improved.  
                      - Clearly states additional research questions that could be the subject of future studies and indicates why further research would be beneficial. |        |
<table>
<thead>
<tr>
<th>General Presentation</th>
<th>Poor 0-2 points</th>
<th>Satisfactory 3-4 points</th>
<th>Excellent 5 points</th>
<th>POINTS</th>
</tr>
</thead>
</table>
| **Overall Organization of Presentation** | - Poorly organized  
- No logical order to material presented. | - Good organization of presentation  
- Only minor logical errors in flow | - Excellent organization  
- Logical progression through the material. | |
| **Delivery** | - Not all team members participated in presentation  
- Presentation did not appear to be prepared or rehearsed | - All team members gave good delivery of information BUT  
- Minor issues glitches indicated additional preparation was necessary | - Excellent delivery of information by all team members  
- Easy to follow presentation  
- Obvious that presentation had been well-rehearsed beforehand | |
| **Individual Slides/ Presentation components** | - Presentation components are carelessly designed, difficult to follow  
- Text is hard to read due to color choices/background images/font size,  
- Citations aren’t given when appropriate,  
- Overuse of distracting animations and flash | - Presentation components are good but are lacking in one of the following:  
- Legibility (slides are hard to read),  
- Color choice  
- Distracting background images  
- Citations are missing when needed. | - Presentation components carefully designed and easy to follow  
- Appropriate choice of images and colors  
- Citations given when appropriate  
- Animations, if used, are not distracting or overdone | |
| **Question and Answer session** | - Team members had difficulty answering questions, due to a lack of understanding of the project and background information. | - Good Q+A session,  
- All team members fairly knowledgeable about project and background information | - Excellent Q+A session  
- All team members very knowledgeable about project and background information | |
| **Sum of above = total points** | | | | ```
- 60
```