

Juried Response Rubric

Elements	5 Points	4 Points	3 Points	2 Points	1 – 0 Points	Total
Problem Statement	The problem statement succinctly describes a technical problem.	The problem statement adequately describes a technical problem.	The problem statement describes a technical problem. The problem statement is lengthy and rambling.	The problem statement does not accurately describe a technical problem.	There is little or no evidence that a problem statement has been included.	
Comments:						
Problem Justification	The project identifies multiple justifications. The viewer understands why the project was undertaken.	The project identifies sufficient justifications. The viewer understands why the project was undertaken.	The project identifies some justifications. The viewer questions whether the project is valid.	The project identifies one justification. The viewer questions whether the project is valid.	The project does not accurately identify a problem justification. The viewer questions whether the project is valid.	
Comments:						
Current and Past Solutions	Multiple viable current or past solutions to the problem are identified. High quality graphic illustrations of each solution are included.	Sufficient viable current or past solutions to the problem are identified. Graphic illustrations of each solution are included.	Some current or past solutions to the problem are identified. Poor quality graphic illustrations of each solution are included.	Fewer than five current or past solutions to the problem are identified. Graphic illustrations of each solution are omitted.	There is little to no evidence that current or past solutions or graphic illustrations of such are included.	
Comments:						
Consideration of Alternatives	At least three viable concepts exist. The student selects the most appropriate concept and clearly justifies the choice using the appropriate criteria.	At least three concepts exist. The student selects an appropriate concept and is able to partially justify the choice using marginally acceptable criteria.	At least three concepts exist. The student selects a concept using inadequate criteria.	Fewer than three concepts exist.	There is no evidence that alternative concepts have been considered.	

Comments:						
Prototype Design	The prototype is clearly based upon the group's research. Plans are complete and technically specific. The plans address ease of construction, operation, and maintenance. Plans are well-documented as technical drawings with dimensions and tolerances.	The prototype is clearly based upon the group's research. The plans contain minor specification errors or omissions. The plans address ease of construction, operation, and maintenance.	The prototype is loosely based upon the group's research. The plan contains one or two major specification errors. The plans marginally address ease of construction, operation, and maintenance.	The prototype is unrelated to the group's research. The plans lack the specifications necessary for construction. Functional parts are missing from the plans.	There is little to no evidence that a prototype has been designed.	
Comments:						
Prototype Construction	The prototype construction is free of workmanship defects and does not include temporary rigging. The prototype adheres to the dimensions and tolerances specified in design notes.	The prototype is adequately constructed but with some obvious defects. The prototype does not indicate strict adherence to the dimensions and tolerances specified in design notes.	The prototype is constructed to be functional, but the construction is not well executed. Numerous workmanship defects are apparent. The prototype does not adhere to the dimensions and tolerances specified in design notes.	The prototype is dysfunctional, incomplete, or unsafe to operate. The prototype does not adhere to the dimensions and tolerances specified in design notes.	The prototype either does not exist or is significantly incomplete.	
Comments:						
Prototype Testing	Testing procedures and results are presented. Detailed descriptions of the design modifications that were made based upon the results of prototype testing are presented and explained.	Testing procedures and results are presented. Descriptions of the design modifications that were made based upon the results of prototype testing are given.	A cursory summary of testing procedures and results is presented. Less than adequate descriptions of the design modifications that were made based upon the results of prototype testing are given.	Testing procedures and results are not presented. Less than adequate descriptions of the design modifications that were made based upon the results of prototype testing are given.	Little to no evidence exists to indicate that prototype tests were conducted.	
Comments:						

<p>Students' Depth of Knowledge</p>	<p>Students were able to answer the panel's questions on a range of technical topics related to their problem's solution, demonstrating exceptional content knowledge.</p>	<p>Students were able to answer most of the questions. Not all students participated in the question and answer phase of their presentation.</p>	<p>Students were able to answer some questions related to their proposed solution. Not all students participated in the question and answer phase of their presentation.</p>	<p>Students were unable to answer many questions, and content knowledge appeared weak.</p>	<p>There is little to no evidence that work was conducted or that students' content knowledge was enhanced.</p>	
<p>Comments:</p>						
<p>Presentation Skills</p>	<p>The presentation indicates detailed preparation. Excellent delivery including the use of voice, posture, eye contact, gestures, pacing, and use of pictures, graphs, computer models, etc. The presentation is interesting and vivid.</p>	<p>The presentation indicates satisfactory preparation. Good delivery including the use of voice, posture, eye contact, gestures, pacing. The presentation includes some use of pictures, graphs, computer models, etc.</p>	<p>The presentation indicates some preparation. Adequate delivery including marginal use of voice, posture, eye contact, gestures, pacing, and marginal use of pictures, graphs, computer models, etc.</p>	<p>The presentation indicates minimal preparation. Unsatisfactory delivery</p>	<p>The presentation indicates that little to no preparation and practice were conducted prior to the formal presentation.</p>	
<p>Comments:</p>						
<p>Presentation Content</p>	<p>The presentation provides an effective executive summary. Only "big picture" material is discussed, but students are prepared to talk in extreme detail during the question and answer period. Content and visual imagery are appropriate.</p>	<p>The presentation provides an adequate executive summary. Students are prepared to address most general details during the question and answer period. Content and visual imagery are acceptable.</p>	<p>The presentation either does not cover the topics sufficiently or covers the topics in too much technical detail. Transitions from one topic to another are bulky or unexplained.</p>	<p>The presentation possesses major error(s) in the students' choice of content. Students seem to be focusing on one area to divert attention from other areas in which they are lacking.</p>	<p>The presentation content is severely lacking, disorganized, unprofessional, or does not fulfill the goal of the final presentation.</p>	
<p>Comments:</p>						

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Overall Comments:
