

## PHY 302 SYMPOSIUM PRESENTATION AND ORAL DEFENSE RUBRIC

Presenter Name: \_\_\_\_\_

Project Title: \_\_\_\_\_

Peer Evaluator Name: \_\_\_\_\_

<b>Dimension</b>	<b>Good presentation: (3 points)</b>	<b>Fair presentation: (2 points)</b>	<b>Poor presentation: (1-0 points)</b>	<b>Score</b>
<b>Introduction</b>	Presenter started with a brief overview the four following items: 1) the purpose of the lab, 2) summary of the procedures followed, 3) what degree of accuracy was achieved in work, and 4) what the possible sources of error were.	Presenter gave a mostly complete but somewhat unclear or disorganized overview statement.	Presenter provided no overview statement or the statement was so short as to be meaningless.	
<b>Apparatus</b>	Presenter described all laboratory equipment used in the investigation, along with a detailed diagram to illustrate the configuration of the equipment.	Presenter did only a fair job of describing the equipment used in the investigation, but did not include a detailed diagram to illustrate the configuration of the equipment.	Did very inadequate job of or does not describe apparatus used in capstone project and/or did not provide a detailed program to illustrate the configuration of the equipment.	
<b>Procedure</b>	Presenter included a clear step-by-step description of the procedure used to conduct the experiment identifying and naming all pertinent experimental variables and briefly described how the independent and extraneous variables were manipulated or controlled.	Presenter included a somewhat “hazy” description of the procedure used to conduct the experiment identifying and naming all pertinent experimental variables and only vaguely describe how the independent and extraneous variables were manipulated or controlled.	Presenter included a very unclear or omitted description of the procedure used to conduct the experiment and failed to identify and/or name all pertinent experimental variables; failed to describe how the independent and extraneous variables were manipulated or controlled.	
<b>Data</b>	Presentation included data tables that were neat and orderly. Data consisted of as many trials and as wide a range as judgment would indicate necessary. The units for physical measurements (kg, cm, s, etc.) in a data table were specified in column heading only.	Presentation included data tables that were neat and orderly but some what incomplete in that they do not include some of the required information: data consist of as many trials and as wide a range as judgment would indicate necessary; the units for physical measurements (kg, cm, s, etc.) in a data table are not specified.	Data only alluded to, not presented, or are presented in such a way as to be hopelessly useless. Contains multiple errors in presentation such as: data consist of as inadequate trials and to narrow range as judgment would indicate necessary; the units in a data table are not specified.	
<b>Analysis of Data</b>	The analysis of data was a coherent and well-ordered presentation of sample calculations made as part of the experiment; showed all employed equations as part of sample calculations, and identified all pertinent variables.	The analysis of data was somewhat incoherent presentation of sample data made as part of the experiment; showed all employed equations as part of sample calculations, and identified all variables.	No, inappropriate, or meaningless data analysis conducted. Did not include employed equations as part of sample calculations, and failed to identify pertinent variables.	
<b>Graphs</b>	If graphs are utilized, they were prepared using a graphing program; care was taken to scale the axes appropriately; labeled each graph with a title; labeled and gave units on each of the graph's axes [e.g., velocity (meters/second)]. The appropriate smooth curve was drawn representing the function graphed. Data were not connected with a series of straight lines.	If graphs are utilized, they were in the main prepared correctly and presented appropriately. Minor deficiencies such as care not taken to scale the axes appropriately; graph not labeled with a title; axes not labeled appropriately [e.g., velocity (meters/second)]. The appropriate smooth curve not drawn representing the function graphed; data are connected with a series of straight lines.	Graphs were poorly prepared or not prepared and included at all as judgment would suggest. Graphs were inappropriately used to present meaningful information; graphs include inappropriate or meaningless information.	

<b>Interpretation of Graphs</b>	If the graph of data is a straight line, then presenter determined the slope and intercept, and included the approximate equation on the graph. If the graph was not a straight line, then the presenter made an attempt to linearize the data; explained the meaning of slopes and intercepts.	If the graph of data is a straight line, then presenter determined the slope and intercept but did not include on graph; the graph was not a straight line, but the presenter made no attempt to linearize the data and interpret the meaning of the slope and intercept. Failed to explain slopes and intercepts.	Did inadequate or unacceptable job of interpreting graphical data. Failed to present and explain slopes and intercepts as appropriate.	
<b>Accuracy</b>	Presenter's work reflected the fact that care was taken in all measurement processes including repeated measures and appropriate interpretations thereof.	Presenter's work did not reflect the fact that care was consistently taken in all measurement processes including repeated measures and appropriate interpretations thereof.	Presenter's work reflected a lack of care in taking all measurement, including a failure to make repeated measures and conduct appropriate interpretations thereof.	
<b>Error Analysis</b>	Presenter demonstrated that serious efforts were made at conducting error analysis. Errors in data were propagated into error in the result using appropriate strategies. Appropriate statistics were used to compare theoretical and experimental data.	Presenter demonstrated that moderate but not complete efforts were made at conducting error analysis. Errors in data were propagated into error in the result using appropriate strategies. Appropriate statistics were used to compare theoretical and experimental data; errors made.	Presenter demonstrated limited effort or no effort at all to made conduct an error analysis. Errors in data were not propagated into error in the result using appropriate strategies. Statistics were not used to compare theoretical and experimental data.	
<b>Findings</b>	Presenter made significant findings that are evidence-base, accurate, and clearly expressed.	Presenter has made few significant findings or findings are inconclusive.	Presenter has made no significant findings and has not met objectives.	
<b>Professionalism</b>	If a result departs markedly from the anticipated result (as indicated by a large margin of error), presenter showed and explained follow-up sets of measurements made to isolate and eliminate the source(s) of error.	If a result departs markedly from the anticipated result (as indicated by a large margin of error), presenter explained how additional measurements can made to isolate and eliminate the source(s) of error.	If a result departs markedly from the anticipated result (as indicated by a large margin of error), presenter did not indicate that any efforts were made to isolate and eliminate the source(s) of error.	
<b>Organization</b>	The presentation was well - organized, moving from general topics to specific details; provided a good explanation of the work.	The presentation was somewhat disorganized and provided too much detail without giving a good explanation of the work.	The presentation was disorganized and dealt completely with details without providing a broad explanation of the work.	
<b>Presentation Technology</b>	Presenter made effective use of technology to present findings; contains visual aides that helped audience understand work; visuals had a neat and professional look, easily understood; used well to make points.	Presenter made improper use of technology to present work and findings; contained few or inadequate visual aids or visual aids have a neat and professional appearance, but poorly used in making points.	Presenter made no use of technology to present work and findings; contained no visual aids or visual aids were so poorly constructed as to be worthless.	
<b>Speaking Skills</b>	Presenter used presentation resources as a guide, gave detailed explanations, was easily understandable, and kept eye contact with the audience.	Presenter relied heavily on presentation to make report; somewhat comfortable with the topic.	Presenter essentially read the material from a presentation to make the report; clearly uncomfortable with the topic.	
<b>Questions and Answers</b>	Presenter answered questions clearly and accurately, showing a thorough understanding of the research project.	Presenter answered only some of the questions well, showing an adequate understanding of the research project.	Presenter answered none of the answer questions well.	
<b>Overall Impression</b>	Peer evaluator feels that presenter did a good job of researching the given capstone problem.	Peer evaluator feels that presenter did a marginal job of researching the given capstone problem.	Peer evaluator feels that presenter did an inadequate to unacceptable job of researching the given capstone problem.	
<b>TOTAL POINTS:</b>				