

BIOLOGY Graduate Student oral communication skills rubric (Scale of 1-5, where 5 is the highest)

SCORE	HYPOTHESIS AND/OR STATEMENT OF PROBLEM	METHODS AND CONTROLS/COMPARISON	RESULTS	CONCLUSION AND FUTURE WORK
1	<ul style="list-style-type: none"> The hypothesis/statement of problem was inappropriate or was missing Little or no background information was included or connected Goal of project was not stated 	<ul style="list-style-type: none"> Methods section missing Serious lack of controls or discussion of controls 	<ul style="list-style-type: none"> Results are not yet available or reproducible Presentation of data was missing 	<ul style="list-style-type: none"> Conclusions were missing There was no connection with the hypothesis
2	<ul style="list-style-type: none"> A questionable hypothesis/ statement of problem was presented and was not necessarily supported Some relevant background information was included, but not connected Goal of project was not clear 	<ul style="list-style-type: none"> No discussion of choice of methods Controls or comparative groups not adequately described; some appropriate controls or groups were missing 	<ul style="list-style-type: none"> Some data were lacking not fully sufficient to address the hypothesis Presentation of data was included, but unclear or difficult to comprehend 	<ul style="list-style-type: none"> Conclusions were given Little connection with the hypothesis was apparent
3	<ul style="list-style-type: none"> A questionable hypothesis/ statement of problem was presented Background information was relevant, but connections were not made Goal of project was stated understandably 	<ul style="list-style-type: none"> Little comment on why the methods were chosen and others not chosen Adequate discussion of controls or comparative groups; some significant controls or comparative groups were lacking 	<ul style="list-style-type: none"> Adequate amounts of reasonably good data were presented to address the hypothesis Presentation of data was not entirely clear 	<ul style="list-style-type: none"> Reasonable conclusions were given Conclusions were not compared to the hypothesis and their relevance was not discussed
4	<ul style="list-style-type: none"> A logical hypothesis/statement of problem was presented Background information was relevant, but connections were not clear Goal of project was stated clearly; showed relevance beyond project 	<ul style="list-style-type: none"> Good explanation of choice of methods Clear discussion of controls or comparative groups; most controls or comparative groups were included 	<ul style="list-style-type: none"> Sufficient amounts of good data were presented to address the hypothesis Presentation of data was clear and logical 	<ul style="list-style-type: none"> Reasonable conclusions were given and supported with evidence Conclusions were compared to hypothesis, but their relevance was not discussed
5	<ul style="list-style-type: none"> ☒ A logical hypothesis/statement of problem was presented clearly ☒ Background information was relevant and summarized well. Connections to previous literature and broader issues were clear Goal of project was stated clearly and concisely; showed clear relevance beyond project 	<ul style="list-style-type: none"> Thorough explanation of why particular methods were chosen Clear discussion of controls or comparative groups; all appropriate controls or comparative groups were included 	<ul style="list-style-type: none"> Substantial amounts of high quality data were presented sufficient to address the hypothesis Presentation of data was clear, thorough, and logical 	<ul style="list-style-type: none"> Reasonable conclusions were given and strongly supported with evidence Conclusions were compared to hypothesis and their relevance in a wider context was discussed

SCORE	OVERALL PRESENTATION & HANDLING QUESTIONS	POSTER BOARD OR POWERPOINT PRESENTATION	UNDERSTANDING INTERDISCIPLINARY SCIENCES (OPTIONAL)
1	<ul style="list-style-type: none"> Does not demonstrate any knowledge of the research project Reads from the poster (slide or script) all the time Does not use the available visual aid to enhance presentation Does not understand questions Presentation is very confusing 	<ul style="list-style-type: none"> Some of the expected components are present, but poorly laid out and confusing to follow in the absence of the presenter. The text is hard to read, messy and illegible, and contains multiple spelling or typographical errors very poor background The figures and tables are poorly done Visual aids are not used 	<p>Student views the problem or research question from a single discipline:</p> <ul style="list-style-type: none"> Methods developed within a single discipline Analyses commonly used within a single discipline Discovery results from knowledge within a discipline Discovery advances a single discipline Discovery impacts a single discipline
2	<ul style="list-style-type: none"> Demonstrates a poor knowledge of the research project Reads from the poster (slide or script) most of the time Does not use the available visual aid to enhance presentation effectively Has difficulty answering questions Presentation is unclear 	<ul style="list-style-type: none"> Some of the expected components are present, but layout is untidy and confusing to follow in the absence of the presenter The text is hard to read due to font size or color and inconsistently free of spelling or typographical errors; the background may be distracting The figures and tables are not related to the text, or are not appropriate, or are poorly labeled Photographs/tables/graphs are limited and do not improve understanding of the project 	<p>Student views the problem or research question from another discipline:</p> <ul style="list-style-type: none"> Methods developed in another discipline, but commonly used in your discipline Analyses developed in another discipline, but commonly used in your discipline Discovery results from knowledge within a discipline, but influenced by different discipline Discovery advances a single discipline, but broader influence is recognized Discovery impacts a single discipline, but broader influence is recognized
3	<ul style="list-style-type: none"> Demonstrates some knowledge of the research project Reads from the poster (slide or script) some of the time Uses some visual aids to enhance the presentation Has some difficulty answering challenging questions Presentation is generally unclear and inconsistent 	<ul style="list-style-type: none"> Most of the expected components are present, but layout is confusing to follow in the absence of presenter The text is relatively clear and legible, but inconsistently free of spelling or typographical errors; the background may be distracting The figures and tables are not always related to the text, or appropriate, or are labeled incorrectly Photographs/table/graphs do not improve understanding 	<p>Student connects the problem or research question using more than one established discipline:</p> <ul style="list-style-type: none"> Methods developed in another established discipline but connected to your discipline Analyses developed in another established discipline but connected to your discipline Discovery results from knowledge connecting more than established discipline Discovery connects more than one established discipline Discovery impacts more than one established discipline
4	<ul style="list-style-type: none"> Demonstrates a good knowledge of the research project Speaks clearly and naturally; makes eye contact Uses visual aids to enhance the presentation Answers most questions Presentation is clear for the most part, but not consistently 	<ul style="list-style-type: none"> All expected components are present, but layout is crowded or jumbled and somewhat confusing to follow in the absence of presenter The text is relatively clear, legible, and mostly free of spelling or typographical errors; the background is unobtrusive Most of the figures and tables are appropriate and labeled correctly Photographs/tables/graphs improve understanding 	<p>Student integrates the problem or research question from more than one discipline:</p> <ul style="list-style-type: none"> Methods developed in more than one discipline are integrated Analyses developed in more than one discipline are integrated Discovery results from knowledge integrated from more than one discipline Discovery integrates more than one discipline Discovery impacts more than one discipline
5	<ul style="list-style-type: none"> Demonstrates a very strong knowledge of the research project Speaks clearly, naturally and with enthusiasm; makes eye contact Comfortably uses visual aids to enhance presentation Answers difficult questions clearly and succinctly Presentation is consistently clear and logical 	<ul style="list-style-type: none"> All expected components are present, clearly laid out, and easy to follow in the absence of presenter The text is concise, legible, and consistently free of spelling or typographical errors; the background is unobtrusive The figures and tables are appropriate and consistently labeled correctly Photographs/tables/graphs improve understanding and enhance the visual appeal 	<p>Student uses more than one discipline to radically changes understanding of an important or existing concept or practice or to provide pathways to new frontiers:</p> <ul style="list-style-type: none"> Methods using more than one discipline are novel Analyses using more than one discipline are new Discovery results from knowledge in more than one discipline transforming that discipline Discovery integrates more than one discipline creating a new discipline Discovery impacts more than one discipline by creating a new paradigm or frontier