

| Performance Indicator | Outstanding | Good | Competent | Needs Revision |
|---|---|---|---|---|
| Contextualize <i>Paper</i> _____ <i>Pres.</i> _____ | <input type="checkbox"/> Background research has been thoroughly conducted using at least two original sources. <input type="checkbox"/> Sources are all appropriately cited. <input type="checkbox"/> The significance of the problem is clearly stated. <input type="checkbox"/> The hypotheses/theses are grounded in the background research. | <input type="checkbox"/> Background research has been thoroughly conducted. <input type="checkbox"/> Sources are appropriately cited. <input type="checkbox"/> The significance of the problem is stated. <input type="checkbox"/> The hypotheses/theses are relevant to the background research. | <input type="checkbox"/> Background research is included in the introduction. <input type="checkbox"/> Sources are cited. <input type="checkbox"/> The significance of the problem is stated. <input type="checkbox"/> The hypotheses/theses are clearly stated. | <input type="checkbox"/> Background research is not included in the introduction. <input type="checkbox"/> Sources are not cited. <input type="checkbox"/> The significance of the problem is not stated. <input type="checkbox"/> The hypotheses/theses are not stated. |
| Critique Experimental Design <i>Paper</i> _____ <i>Pres.</i> _____ | <input type="checkbox"/> Identifies, describes and controls all relevant variables. <input type="checkbox"/> Thoughtfully evaluates the procedure and/or set up <input type="checkbox"/> Clearly describes bias in the design | <input type="checkbox"/> Identifies, describes and controls most relevant variables. <input type="checkbox"/> Evaluates the procedure and/or set up <input type="checkbox"/> Clearly describes bias in the design | <input type="checkbox"/> Identifies, describes and controls some relevant variables. <input type="checkbox"/> Evaluates the procedure and/or set up <input type="checkbox"/> Attempts to describe bias in the design | <input type="checkbox"/> Does not identify, describe or control any variables. <input type="checkbox"/> Does not evaluate the procedure and/or set up <input type="checkbox"/> Does not attempt to describe bias in the design |
| Collect, Organize and Present Data <i>Paper</i> _____ <i>Pres.</i> _____ | <input type="checkbox"/> Collects data in a reliable and valid manner. <input type="checkbox"/> Presents relevant data that is consistent with the problem. <input type="checkbox"/> Generates appropriate tables, charts and graphs with data and makes appropriate calculations. <input type="checkbox"/> Conducts thorough mathematical analysis of the data. | <input type="checkbox"/> Collects data in a reliable and valid manner. <input type="checkbox"/> Presents relevant data that is consistent with the problem. <input type="checkbox"/> Generates appropriate tables, charts and graphs with data and/or makes appropriate calculations. <input type="checkbox"/> Conducts mathematical analysis of the data. | <input type="checkbox"/> Collects data in a reliable and valid manner. <input type="checkbox"/> Presents data that is consistent with the problem. <input type="checkbox"/> Generates tables, charts and graphs with data. <input type="checkbox"/> Conducts analysis of the data. | <input type="checkbox"/> Collects data in a non-reliable and/or invalid manner. <input type="checkbox"/> Does not present data or presents data that is not relevant to the problem. <input type="checkbox"/> Does not generate tables, charts and graphs. <input type="checkbox"/> Does not analyze the data. |
| Analyze and Interpret Results <i>Paper</i> _____ <i>Pres.</i> _____ | <input type="checkbox"/> Draws thoughtful conclusions that are supported by the data. Relates conclusions to original question. <input type="checkbox"/> Thoroughly describes sources of error and their effects on the data. | <input type="checkbox"/> Draws conclusions that are supported by the data. Relates conclusions to original question. <input type="checkbox"/> Describes several sources of error and their effects on the data. | <input type="checkbox"/> Draws conclusions that are partially supported by the data. Attempts to relate conclusions to original question. <input type="checkbox"/> Describes sources of error and attempts to describe their effects on the data. | <input type="checkbox"/> Draws no conclusions or draws conclusions that are not supported by the data. <input type="checkbox"/> Does not attempt to relate conclusions to original question. <input type="checkbox"/> Does not describe sources of error or does not attempt to describe their effects on the data. |
| Revise Original Design <i>Paper</i> _____ <i>Pres.</i> _____ | <input type="checkbox"/> Proposes effective and relevant revisions for the experimental plan to lessen the effects of bias and sources of error. <input type="checkbox"/> Poses thoughtful and relevant questions for future research. | <input type="checkbox"/> Proposes relevant revisions for the experimental plan to lessen the effects of bias and sources of error. <input type="checkbox"/> Poses relevant questions for future research. | <input type="checkbox"/> Proposes revisions for the experimental plan to lessen the effects of bias and sources of error. <input type="checkbox"/> Poses questions for future research. | <input type="checkbox"/> Does not propose revisions for the experimental plan. <input type="checkbox"/> Does not pose questions for future research. |
| Defense (for oral component only) | <input type="checkbox"/> Thoroughly answers questions relevant to the experiment and related topics. | <input type="checkbox"/> Adequately answers questions relevant to the experiment and related topics. | <input type="checkbox"/> Adequately answers questions relevant to the experiment. | <input type="checkbox"/> Does not adequately answer questions relevant to the experiment. |