

## PROJECT SPECIFICATION

**Test a Perceptual Phenomenon****Responses to Project Questions**

CRITERIA	MEETS SPECIFICATIONS
Question 1: Identify variables in the experiment	Q1: Question response correctly identifies the independent and dependent variables in the experiment.
Question 2a: Establish hypotheses	Q2a: Null and alternative hypotheses are clearly stated in words and mathematically. Symbols in the mathematical statement are defined.
Question 2b: Establish a statistical test	Q2b: A statistical test is proposed which will distinguish the proposed hypotheses. Any assumptions made by the statistical test are addressed.

<p><b>CRITERIA</b> Question 3: Report descriptive statistics</p>	<p><b>MEETS SPECIFICATIONS</b> Q3: Descriptive statistics, including at least one measure of centrality and one measure of variability, have been computed for the dataset's groups.</p>
<p>Question 4: Plot the data</p>	<p>Q4: One or two visualizations have been created that show off the data, including comments on what can be observed in the plot or plots.</p>
<p>Question 5: Perform the statistical test and interpret your results</p>	<p>Q5: A statistical test has been correctly performed and reported, including test statistic, p-value, and test result. The test results are interpreted in terms of the experimental task performed. Alternatively, students may use a bootstrapping approach to simulate the results of a traditional hypothesis test.</p>
<p>Question 6: Digging deeper and extending the investigation <i>Question 6 is optional and does not need to be answered in order to meet project specifications.</i></p>	<p>Q6: Hypotheses regarding the reasons for the effect observed are presented. An extension or related experiment to the performed Stroop task is provided, that may produce similar effects.</p>