

Subject	Topics to Include
<b><i>Business Purpose</i></b>	<p>Company X is a research based lab that runs alcohol studies using mice. This company hires college students to conduct some of their research projects. All of these college students are in some kind of science program and need projects to boost their resume. It is important that these college students understand how to conduct an experiment and since this basic knowledge they covered this material early on in their academic career. This course is meant to provide refresher content for these students.</p> <p>Training these students on how to conduct a proper experiment is key to getting reputable data and farthing these alcohol studies.</p> <p>80% pass rate on the assessment will determine whether these students have a good understanding of the scientific method process.</p>
<b><i>Target audience</i></b>	College science students that need a refresher course in conducting a proper experiment.
<b><i>Training Time</i></b>	30 minutes
<b><i>Training Recommendation</i></b>	1 Rise course with assessment
<b><i>Deliverables</i></b>	<p>1 e-Learning course developed in Articulate Rise that includes:</p> <ul style="list-style-type: none"> <li>● 5 steps on how to conduct an experiment</li> <li>● Assessment</li> </ul>
<b><i>Learning Objectives</i></b>	<ol style="list-style-type: none"> <li>1. Know the order of steps in the experimentation process.</li> <li>2. Discern a well written or poorly written scientific question.</li> <li>3. Discern a well written or poorly written hypothesis</li> <li>4. Identify what variables in an experiment to control.</li> <li>5. Draw conclusions from the data by analyzing graphs.</li> </ol>
<b><i>Training Outline</i></b>	<ul style="list-style-type: none"> <li>● <b>Introduction</b> <ul style="list-style-type: none"> <li>o Objectives</li> <li>o What is science?</li> <li>o Experimentation process steps</li> </ul> </li> </ul>

Subject	Topics to Include
<i>Training Outline Continued</i>	<ul style="list-style-type: none"> <li>● <b>Ask a testable question.</b> <ul style="list-style-type: none"> <li>○ What is a testable question?</li> <li>○ Practice</li> </ul> </li> <li>● <b>Research the question.</b> <ul style="list-style-type: none"> <li>○ Why is research needed?</li> <li>○ What are reputable sites to use?</li> <li>○ Practice</li> </ul> </li> <li>● <b>Create a testable hypothesis.</b> <ul style="list-style-type: none"> <li>○ What is a hypothesis?</li> <li>○ What is a proper format for a hypothesis?</li> <li>○ Practice</li> </ul> </li> <li>● <b>Test the hypothesis with an experiment.</b> <ul style="list-style-type: none"> <li>○ What is a variable?</li> <li>○ What is a control variable?</li> <li>○ What is an experimental variable?</li> <li>○ Example of experiment.</li> <li>○ What is a trial?</li> <li>○ Practice</li> </ul> </li> <li>● <b>Analyze data and draw conclusions.</b> <ul style="list-style-type: none"> <li>○ Common types of graphs.</li> <li>○ How to know when to use line, bar, or pie graph?</li> <li>○ Graph analyzation tips.</li> <li>○ Practice</li> </ul> </li> <li>● <b>Assessment</b></li> <li>● <b>Summary</b></li> </ul>
<i>Evaluation Plan</i>	<ul style="list-style-type: none"> <li>● 5 assessment questions will be given</li> <li>● Learners must score 80% to pass with 2 attempts to pass.</li> </ul>