**Experimental Design Project - Initial Experimental Design**

1. Experiment/Study Topic:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Write a hypothesis for the problem/observation/natural phenomenon you will be examining.

**OR**

Write research/study questions if your project is more discovery based/descriptive rather than hypothesis-driven.

1. Design an experiment to test your hypothesis OR answer your research/study questions. You will need to review your experiment with your laboratory instructor before you begin your actual experiment. Be sure to consider and identify the following in the experiment you design:

• based on the experiment you will be using to test your hypothesis, what are 1 or 2 plausible prediction(s)?–

• independent variable(s)–

• dependent variable(s) and how you’ll measure it/them–

• controlled variables–

• control group (if applicable)–

• experimental group (if applicable)–

• whether the data are qualitative or quantitative–

• how you might present this data–

• replication and/or sample size–

1. Briefly describe how you plan to conduct your experiment/study: