BIO 162 Plant Signaling
Experimental Design

Names: _____

General

1. What is the independent/explanatory variable?

2. Is the independent variable categorical/discrete or continuous/numeric?

3. What is the dependent/response variable?

4. Is the dependent variable categorical/discrete or continuous/numeric?

How will you set up the independent variable?

1. Where on the plant will you cut?

2. How many stems will you cut per plant?

3. How will you pick which stem to cut?

4. What else should you consider in experimental setup?

How will you measure the dependent variable?

1. Where on the plant will you measure relative to your treatment?

2. How will you measure each axillary bud (i.e., where will you start and you're your measurements)?

3. How many measurements will you take per stem?

4. What units will you use?

5. What other factors are important to consider in data collection?

Confounding Variables

1. What conditions/variables outside of the independent variable may influence your results?

2. Which of the variables mentioned can be controlled (and how)?

3. What can do you to minimize the effect of variables for which you cannot control?

Final Experimental Design
Plant Signaling Experiment

Protocol for Experiment Setup

Protocol for Data Collection

Alternative Hypothesis:

Null Hypothesis:

Prediction: