

# Pre-Course Survey

Please take a few moments to complete the following survey. The results will be used to improve the teaching of STEM courses at Auburn University. All responses will be anonymous. When you are finished, please place the survey in the envelope provided. Thank you.

## Part 1

What is your current age? \_\_\_\_\_

Please specify your gender? \_\_\_\_\_

What is your major? \_\_\_\_\_

What is your current GPA? \_\_\_\_\_

What program are you currently enrolled in?

☐ High School ☐ Bachelor's Degree

☐ Master's Degree ☐ Doctoral Degree

Number of semesters in current program? \_\_\_\_\_

Select from the list of career options below. Rank your interest in order from most interested (1) to least interested (5).

\_\_\_\_ Academics

\_\_\_\_ Field Research

\_\_\_\_ Industrial Science

\_\_\_\_ Sales

\_\_\_\_ Consulting/ Technical or Product Support

How long have you previously worked in a scientific laboratory? (Volunteer, class credit, or paid)

How long have you previously worked in a scientific laboratory? (Volunteer, class credit, or paid)

☐ No Experience

☐ < 1 year

☐ 1-2 years

☐ 3+ years

I am going to enter a career in a research lab.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Strongly Disagree

Strongly Agree

I prefer to study and learn on my own.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Strongly Disagree

Strongly Agree

Anonymous Identifier: \_\_\_\_\_

First three letters of  
mothers first name

First two numbers of  
current street address

People close to me encouraged participation in STEM events in middle/high school.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Strongly Disagree

Strongly Agree

I participated in group learning with siblings or friends in my household.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Strongly Disagree

Strongly Agree

## Part 2

I can perform an experiment without aid, when given a protocol.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Strongly Disagree

Strongly Agree

I can design an experiment from beginning to end.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Strongly Disagree

Strongly Agree

I expect to attain an "A" in this course.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Strongly Disagree

Strongly Agree

I am confident in my ability to keep a well-structured lab notebook properly detailing experiments.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Strongly Disagree

Strongly Agree

## Part 3

Research that I do in lab courses will lead to scientific discovery.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Strongly Disagree

Strongly Agree

In laboratory classes, I gain skills that will be applied in my future career.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Strongly Disagree

Strongly Agree

The practices taught in molecular biology courses are applicable in everyday life.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Strongly Disagree

Strongly Agree

Part 4

How often do you use social media platforms to share scientific content with your followers?

- ☐ Never
- ☐ 1-2 times a week
- ☐ 3-4 times a week
- ☐ 5+ times a week

Select from the list of social media platforms below. Rank the platforms you use to share science in order of most commonly used (1) to least commonly used (5).

- \_\_\_\_ Snapchat
- \_\_\_\_ Twitter
- \_\_\_\_ Instagram
- \_\_\_\_ Facebook
- Other not listed: \_\_\_\_\_

Social media is an effective way to share scientific content with the non-science community.

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

Strongly Disagree

Strongly Agree

Sharing scientific content on social media is more engaging than sharing it via scientific publications

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

Strongly Disagree

Strongly Agree

My followers are/would be interested in the scientific content I share.

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

Strongly Disagree

Strongly Agree

I understand what scientific outreach is.

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

Strongly Disagree

Strongly Agree

I would be interested in participating in sharing more scientific outreach through social media.

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

Strongly Disagree

Strongly Agree

I have discussed my research with my peers.

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

Strongly Disagree

Strongly Agree

I have discussed my research in this class with family and close friends.

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

Strongly Disagree

Strongly Agree

I view myself as a scientist.

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

Strongly Disagree

Strongly Agree

I am comfortable explaining science to others.

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

Strongly Disagree

Strongly Agree

I feel like an expert in a field following a typical biology lab course.

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

Strongly Disagree

Strongly Agree

Part 5

Please circle each skill (in the white boxes) that you feel you use on a regular basis in your traditional lab courses. Please do not circle grey subheadings.

Cognitive Skills

Analyze

Speculate

Scrutinize

Infer

Examine

Calculate

Deduce

Differentiate

Contrast

Compare

Validate

Create

Design

Imagine

Formulate

Compose

Speculate

Devise

Plan

Invent

Produce

Contrast

Evaluate

Judge

Critique

Verify

Interperate

Assess

Prioritize

Recommend

Justify

Defend

Apply

Execute

Use

Adapt

Predict

Hypothesize

Carry-out

Revise

Simulate

Practice

Illustrate

Teach

Solve

Understand

Summarize

Classify

Paraphrase

Describe

Give Example

Articulate

Organize

Remember

Define

Identify

Recall

Recognize

List

Label

Match