The CURE pre-course survey

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O Foreign National

O Hispanic/Latino

O Pacific Islander

O Hawaiian

O White

Gender:

- O Male
- Female

O Prefer not to answer

Ethnicity:

- O Alaskan Native
- O American Indian
- O Asian American
- O Black or African American
- **O** Filipino

What is your current status?

- **O** I am a high school student.
- I am a first-year college undergraduate.
- **O** I am a second-year college undergraduate.
- **O** I am a third-year college undergraduate.
- **O** I am a fourth-year college undergraduate.
- **O** I am a graduate or medical student.
- **O** Other
- \mathbf{O} Not applicable / Prefer not to answer

Did you declare a major or concentration yet?

- O Yes
- O No

What major or concentration have you declared? Please write it here (include double majors, concentrations, etc.)

If you have not yet declared a major or concentration, please indicate if you considering a major/concentration in the sciences.

O Definitely yesO It is likelyO I'm not sure

- O It is unlikely O Definitely no
- **O** Prefer not to answer

O Two or more racesO OtherO Prefer not to answer

This question is about your goals beyond your undergraduate degree. It is difficult to list all the goals people may have. The purpose of this question is to learn how many students plan to go on in science, medicine, or other fields, as well as to learn how many students do not plan to go to post-graduate education in their near future. Please choose one:

- **O** My goal is to go to graduate school for a Ph.D. degree in a biology-related field.
- My goal is to go to graduate school for a Ph.D. degree in the physical sciences (including engineering, math, and computer science).
- **O** My goal is to go to graduate school for a Masters Degree in the life sciences.
- My goal is to go to graduate school for a Masters Degree in the physical sciences (including engineering, math, and computer science).
- My goal is to go to graduate school for a Masters or a Ph.D. degree in a social science (including psychology, sociology, anthropology, economics, and political science).
- **O** My goal is to go to graduate school for a Masters or a Ph.D. in humanities or fine arts.
- **O** My goal is earn a certification or degree that will qualify me for teaching.
- O My goal is to go to school for a medical degree (M.D.).
- O My goal is to go to school for an M.D./Ph.D.
- **O** My goal is to go to school for other health professions.
- O My goal is to go to a type of graduate education not mentioned above, such as law school.
- O My goal does not include graduate education for at least the near future.
- Not applicable/Prefer not to answer.

Have you participated in research prior to this course?

- **O** No, I have not had a prior research experience.
- **O** Yes, during one academic semester (typically ~ 10 hr/wk).
- O Yes, during multiple academic semesters (typically ~10 hr/wk).
- O Yes, during a summer research program (typically full-time for at least 5 weeks).
- **O** Yes, during a prior academic semester (or semesters) and a summer.
- **O** Yes, during prior years and/or several summers.
- O Not applicable / Prefer to not answer

Here is a list of common reasons for taking a course. Please read each one and indicate if the reason was important to your decision to take this course.

	Not important	Moderately Important	Very Important	Not applicable
To fill a distribution requirement	0	0	0	Ο
To fill a requirement for my major	0	0	0	0
I need it for graduate or professional school.	0	0	0	0
I need it for my desired employment after college.	0	0	0	0
Interest in the subject matter	0	0	0	0
To learn lab techniques	0	0	0	0
To learn about science and the research process	0	0	0	0
To get hands-on research experience	0	0	0	Ο
It fit in my schedule.	0	0	0	0
The course and/or the instructor has a good reputation.	0	0	0	0
To learn more about my world	0	0	0	0
To contribute to my liberal arts education	0	0	0	0
For personal growth	0	0	0	0
To improve my skills in a foreign language	0	0	0	0
To learn about the places where the course visits	0	0	0	0
To experience a different society and environment	0	0	0	0
To explore a prior interest in the cultures in the places where the course visits	0	0	0	0
To learn how to successfully work and interact with people in a culture other than my own	0	0	0	0
Other personal reasons	0	0	0	0

Course Elements

Please look over this inventory of elements that might be included in a course. For each element, give an estimate of your current level of ability before the course begins. Your current level of ability may be a result of courses in high school or college, or it may be a result of other experiences such as jobs or special programs.

Level of experience						
	None	Little	Some	Much	Extensive	N.A./ Prefer not to answer
a scripted lab or project in which the students know the expected outcome.	0	o	0	0	0	o
a lab or project in which only the instructor knows the outcome.	О	О	О	0	0	o
a lab or project where no one knows the outcome.	0	o	o	o	0	o
at least one project that is assigned and structured by the instructor.	O	O	О	О	0	0
a project in which students have some input into the research process and/or what is being studied.	0	0	o	o	o	0
a project entirely of student design.	0	Ο	0	0	Ο	0
work individually.	0	0	0	0	0	0
work as a whole class.	0	Ο	0	0	Ο	0
work in small groups.	0	0	0	0	Ο	0
become responsible for a part of the project.	О	0	О	О	0	0
read primary scientific literature.	0	Ο	0	0	Ο	0
write a research proposal.	0	0	0	0	0	0
collect data.	0	0	0	0	Ο	0
analyze data.	0	0	0	0	0	0
present results orally.	0	0	0	0	Ο	0
present results in written papers or reports.	0	0	0	Ο	Ο	0
present posters.	0	0	0	0	Ο	0
critique the work of other students.	0	0	0	0	Ο	0
listen to lectures.	0	0	0	0	0	0
read a textbook.	0	0	0	0	0	0
work on problem sets.	0	0	0	0	Ο	0
take tests in class.	0	0	0	0	Ο	0
discuss reading materials in class.	0	0	0	0	0	0
maintain lab notebook.	0	0	0	0	0	0
computer modeling.	0	0	0	0	0	0

Your opinions about yourself and about science

It has become common to say that no student is an empty bucket, waiting for a teacher to pour in knowledge. Research on learning acknowledges that students approach a course with well-formed opinions of themselves and of the subject matter. In this section, we present questions about science and questions about you. These will help us put learning in context.

For each item below please rate your agreement with the item.

	Strongly	Disagree	Neutral	Agree	Strongly	N/A./Prefer
	disagree			<u> </u>	agree	not to answer
Even if I forget the facts, I'll still be able to use the thinking skills I learn in science.	0	0	0	O	0	0
You can rely on scientific results to be true and correct.	0	0	0	0	0	0
The process of writing in science is helpful for understanding scientific ideas.	0	0	0	0	0	0
When scientific results conflict with my personal experience, I follow my experience in making choices.	0	•	0	0	0	0
Students who do not major/concentrate in science should not have to take science courses.	0	0	Ο	0	Ο	0
I wish science instructors would just tell us what we need to know so we can learn it.	0	О	0	О	0	0
Creativity does not play a role in science.	0	0	0	0	Ο	0
Science is not connected to non-science fields such as history, literature, economics, or art.	0	0	0	0	О	0
When experts disagree on a science question, it's because they don't know all the facts yet.	0	O	0	0	0	0
I get personal satisfaction when I solve a scientific problem by figuring it out myself.	0	0	0	0	0	0
Since nothing in science is known for certain, all theories are equally valid.	0	0	0	0	0	0
Science is essentially an accumulation of facts, rules, and formulas.	0	0	0	0	0	0
I can do well in science courses.	0	0	0	0	0	0
Real scientists don't follow the scientific method in a straight line.	0	0	0	0	0	0
There is too much emphasis in science classes on figuring things out for yourself.	0	0	0	0	0	0
Only scientific experts are qualified to make judgments on scientific issues.	0	0	0	0	0	0
Scientists know what the results of their experiments will be before they start.	0	0	0	0	0	0

	Strongly disagree	Disagree	Neutral	Agree	Strongl y agree	N/A./Prefer not to answer
Explaining science ideas to others has helped me understand the ideas better.	О	0	0	0	0	0
The main job of the instructor is to structure the work so that we can learn it ourselves.	0	0	0	0	0	0
Scientists play with statistics to support their own ideas.	О	0	0	0	0	0
Lab experiments are used to confirm information studied in science class.	О	0	0	О	0	0
If an experiment shows that something doesn't work, the experiment was a failure.	О	0	0	0	О	0

Thank you for your participation!