**CISE REU Evaluation Toolkit A la Carte Survey Code Book**

**2017-18**

The origin of items, description of constructs, and documentation of the instrument are included at [this site.](https://reu.uncc.edu/toolkit/la-carte-survey)

**Scoring**

All items are on a 5 point likert type rating scale, with exceptions for Consent, Open Ended items, and Demographic items

For ALL Constructs (e.g. Efficacy, Intent, Grit, etc.): calculate a mean score based on the items in that box

\*Reverse Score Items are indicated as RS.

**Construct/Items**

**Consent**

My participation in the survey is acknowledgement that I have read and understand the consent agreement and agree to participate.

**Discipline**

Please indicate the specific field applicable to your research project:

**Efficacy**

**[**1= Strongly Disagree, 2= Somewhat Disagree, 3= Neutral, 4= Somewhat Agree, 5= Strongly Agree]

Please rate your degree of confidence with the following statements. I can:

Locate primary research literature (e.g. journal articles)

Understand primary research literature

Formulate a research hypothesis

Design an experimental test of a solution to a problem

Collect data

Statistically analyze data

Interpret data analyses

Reformulate a research hypothesis

Orally communicate the results of research projects

Write a research paper for publication

Work with others to investigate a research problem

Discuss research with graduate students

Discuss research with professors

Discuss research at a professional meeting or conference

**Intent toward Graduate School**

**[**1= Strongly Disagree, 2= Somewhat Disagree, 3= Neutral, 4= Somewhat Agree, 5= Strongly Agree]

For me to apply to graduate school is (extremely good/extremely bad).

Most people who are important to me think that (I should/should not) apply to graduate school in [my REU project] discipline.

I plan to apply to graduate school in a [my REU project] discipline.

For me, to apply to graduate school in [my REU project] discipline is (extremely valuable/extremely worthless).

It is expected of me that I will apply to graduate school in [my REU project] discipline.

I will make an effort to apply to graduate school in [my REU project] discipline.

For me to apply to graduate school in [my REU project] discipline is (extremely beneficial/extremely harmful).

I intend to apply to graduate school in [my REU project] discipline.

For me to apply to graduate school in [my REU project] discipline is (extremely pleasant/extremely unpleasant).

Most people whose opinions I value would approve of me applying to graduate school in [my REU project] discipline.

**Attitudes**

**[**1= Strongly Disagree, 2= Somewhat Disagree, 3= Neutral, 4= Somewhat Agree, 5= Strongly Agree]

Please indicate your level of agreement with the following statements.

I hope that my future career will require the use of [my REU project discipline] concepts.

\*RS I think [my REU project discipline] is boring.

\*RS My career goals do not require that I learn [my REU project discipline] skills.

I like to use [my REU project discipline] to solve problems.

\*RS The challenge of solving problems using [my REU project discipline] does not appeal to me.

I think [my REU project discipline] is interesting.

I expect that learning to use [my REU project discipline] skills will help me achieve my career goals.

\*RS I hope that I can find a career that does not require the use of [my REU project discipline] concepts.

The challenge of solving problems using [my REU project discipline] appeals to me.

\*RS I do not like using [my REU project discipline] to solve problems.

I would voluntarily take additional [my REU project discipline] courses if I were given the opportunity.

Developing [my REU project discipline] skills will be important to my career goals.

**Coping**

**[**1= Strongly Disagree, 2= Somewhat Disagree, 3= Neutral, 4= Somewhat Agree, 5= Strongly Agree]

When I do poorly on an important exam, typically:

I do what has to be done one step at a time

I think about how I might best handle the problem

I try to come up with a strategy

**Grit**

**[**1= Strongly Disagree, 2= Somewhat Disagree, 3= Neutral, 4= Somewhat Agree, 5= Strongly Agree]

Please respond to the following 8 items. Be honest – there are no right or wrong answers!

New ideas and projects sometimes distract me from previous ones

Setbacks don’t discourage me

\*RS I have been obsessed with a certain idea or project for a short time but later lost interest

I am a hard worker

\*RS I often set a goal but later choose to pursue a different one

\*RSI have difficulty maintaining my focus on projects that take more than a few months to complete

I finish whatever I begin

I am diligent

**Research Skills**

Please indicate how much you know about the following on a scale from 1 to 5, with 1 being "nothing at all" and 5 being "a great deal."

Research proposal write up

Research presentation preparation

Research presentation

Application to Graduate school

Technical & scientific writing tools

Ethics in scientific research

Authorship citations

Project management

Application of the scientific method

Conference participation

Analyzing data with statistics or other tools

Problem-solving in general

Formulating a research hypothesis that could be answered with data

Identifying appropriate research methods and designs

Understanding the theory and concepts guiding a research project

Defending an argument when asked questions

Explaining my project to people outside my field

Understanding and summarizing journal articles

Relate results to the "bigger picture"

The nature of the job of a researcher

Working collaboratively with others

What graduate school is like

Career options in research

Working independently

**Teamwork**

Below, we ask you questions about leadership and teamwork. By leadership we mean getting people to work together effectively to answer a question or solve a problem (e.g., motivating good performance, dealing with conflict, etc.). Teamwork includes communication, collaboration, etc. Please choose the one number that indicates your agreement with the following statements.

**[**1= Strongly Disagree, 2= Somewhat Disagree, 3= Neutral, 4= Somewhat Agree, 5= Strongly Agree]

I know how to cooperate effectively as a member of a team.

I have high confidence in my ability to function as part of a team.

I can provide strong support for other members of any team that I am on.

I know how to be a good team member.

**Leadership**

**[**1= Strongly Disagree, 2= Somewhat Disagree, 3= Neutral, 4= Somewhat Agree, 5= Strongly Agree]

I know a lot about what it takes to be a good leader.

I know what it takes to help a team accomplish its task.

I am confident of my ability to influence a team I lead.

I know how to encourage good team performance.

I am able to allow other team members to contribute to the task when leading a team.

**Identity as a Scientist**

**[**1= Strongly Disagree, 2= Somewhat Disagree, 3= Neutral, 4= Somewhat Agree, 5= Strongly Agree]

The following questions ask how you think about yourself and your personal identity. We want to understand how much you think that being a scientist is part of who you are. Please choose the one number that indicates your agreement with the following items.

In general, being a scientist is an important part of my self-image.

I have a strong sense of belonging to the community of scientists.

Being a scientist is an important reflection of who I am.

I have come to think of myself as a “scientist.”

I feel like I belong in the field of science.

I am a scientist.

**Post-Only Mentoring Items (only in the post survey)**

**[**1= Strongly Disagree, 2= Somewhat Disagree, 3= Neutral, 4= Somewhat Agree, 5= Strongly Agree]

My primary mentor during the summer REU program was: (faculty or GA)

Other:\_\_\_\_\_\_

My primary mentor during the summer REU program was: (male or female)

Please indicate the extent to which you agree with each statement below about your mentor. My mentor:

was accessible

demonstrated professional integrity

demonstrated content expertise in my area of need

was approachable

was supportive and encouraging

provided constructive and useful critiques of my work

was helpful in providing direction and guidance on research project issues

answered my questions satisfactorily (e.g. timely, clear, comprehensive)

acknowledged my contributions appropriately

suggested appropriate resources

challenged me to extend my abilities

**Post-Only Satisfaction Items (only in the post survey)**

**[**1= Strongly Disagree, 2= Somewhat Disagree, 3= Neutral, 4= Somewhat Agree, 5= Strongly Agree]

How satisfied were you with:

Your faculty advisor

Your housing arrangements (if applicable)

The program in general

Your research experience

Your interaction with project staff

Your interaction with other students

**Demographics (in both pre and post surveys)**

At what institution are you participating in the REU program?

What college or university are you currently attending?

What is your gender?

What is your age?

What is your ethnicity?

Do you have a documented disability?

What level will you be in school in the upcoming fall semester?

What is your expected graduation from your current program?

What is your preferred email address for being contacted for future follow up?

What is your first name?

What is your last name? (Your name is only used to match your pre-survey response to your post-survey response.)

Do you plan to participate in additional REUs?

1=yes, 2= no, 3= uncertain

**Open Ended (post survey only)**

What was the most rewarding experience for you during the REU project?

What was the most frustrating experience for you during the REU project?

Any additional comments and suggestions are welcome below.

What experiences in the REU program were most useful for your future career? (State future career.)

What experience in the REU program was the least useful for your future career?