

# **TUES Bridges Project - ITCS 2214 post**

---

**Introduction and Informed Consent**    **Project Title**    **Building Bridges Within the Undergraduate Major in Computer Science**

**Purpose**    The purpose of this study is to evaluate a new approach to teaching undergraduate computer science courses. We would like to make the courses more engaging by relating programming projects to interesting data sources, and pairing sophomores with seniors in a software development project.

**Investigators**    **Dr Kalpathi R Subramanian**    **Dr Jamie Payton**    **Dr Paula Goolkasian**

**Eligibility**    You may participate if you are 18 years of age or older and enrolled in ITCS 2214.

**Overall Description of Participation**    You are asked to fill out a survey that measures your attitude toward computing. All of the students who are enrolled in ITCS 2214 are asked to participate to provide some baseline data for an NSF sponsored project, which will begin during the 2014-2015 academic year. The survey consists of 38 questions with a few additional demographic questions.

**Length of Participation**    Your participation will take approximately 15 minutes.

**Risks and Benefits of Participation**    There are no known risks to participation in this study. However, there may be risks that are currently unforeseeable. The benefits of participation in this study are providing some baseline information about student attitudes toward computing for a new approach to teaching ITCS 2214.

**Volunteer Statement**    You are a volunteer. The decision to participate in this study is completely up to you. If you decide to be in the study, you may stop at any time. You will not be treated any differently if you decide not to participate in the study or if you stop once you have started.

**Anonymity Statement**    All data collected will be coded and stored in such a manner that it will not be seen by your instructor or any other faculty member in computer science. A person outside of computer science will collect the survey data. Your answers to the items will not have any bearing on your course performance.

**Statement of Fair Treatment and Respect**    UNC Charlotte wants to make sure that you are treated in a fair and respectful manner. Contact the university's Research Compliance Office (704-687-3309) if you have questions about how you are treated as a study participant. If you have any questions about the actual project or study, please contact Dr. Paula Goolkasian (704-687-1335, pagoolka@uncc.edu)

1) I have read the information above and have had the chance to ask questions about this study, and those questions have been answered to my satisfaction. My participation in this survey is an acknowledgement that I have read and understand the consent agreement, and agree to participate.

Yes

No

2) Select your section of ITCS 2214

001 MW 11 am

002 TR 9:30 am

003 TR 11 am

004 MW 2 pm

3) Please enter your Student ID Number (800 number) to proceed with the survey. (Student ID numbers are needed to track the data across the semester and will only be seen by the project evaluator who is outside of computer science).

4) Please rate your agreement with the following statements:

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
-------------------	----------	-----------	-------	----------------

I am comfortable with learning computing concepts.

Computing is an appropriate subject for both men and women to study.

I have little self-confidence when it comes to computing courses.

I hope that my future career will require the use of computer science concepts.

I can learn to understand computing concepts.

I think computer science is boring.

Women and men can both excel in careers that involve computing.

My career goals do not require that I learn computing skills.

I do not think that I can learn to understand computing concepts.

I like to use computer science to solve problems.

I can achieve good grades (B or better) in computing courses.

The challenge of solving problems using computer science does not appeal to me.

I am not comfortable with learning computing concepts.

I think computer science is interesting.

I expect that learning to use computing skills will help me achieve my career goals.

I am confident that I can solve problems by using computer applications.

I hope that I can find a career that does not require the use of computer science concepts.

Men and women are equally capable of solving computing problems.

I doubt that I can solve problems by using computer applications.

The challenge of solving problems using computer science appeals to me.

Knowledge of computing will allow me to secure a good job.

I do not like using computer science to solve problems.

Men and women can both excel in computing courses.

I would voluntarily take additional computer science courses if I were given the opportunity.

Developing computing skills will be important to my career goals.

I feel confident understanding terms/words related to computing.

I am comfortable learning advanced computing skills.

I am unsure about writing computer programs.

I feel confident asking for help when writing programs.

I am confident troubleshooting programming errors.

5) How many computing assignments did you find interesting?

- None
- Only one assignment
- A few assignments
- Most or all assignments

6) I understand the relevance of the assignments to my career goals

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

7) I understand how the material covered in my course relate to society.

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

8) Assignments increase my interest in the subject matter of computing.

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

9) Assignments show me how useful knowledge of computing can be.

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

10) Please compare your level of programming experience with the experience required by the ITCS 2214 course.

The course work requires more programming experience than I have.  
The course work is about right for my programming experience level.

The course work requires less programming experience than I have.

11) Please rate the level of experience required by your ITCS 2214 computing assignments relative to your experience.

The assignments require more experience than I have.  
The assignments are about right for my experience level.  
The assignments require less experience than I have.

12) The average total number of hours per week I have spent on homework and lab is:

0-3 hours

4-6 hours

7-9 hours

10 or more hours

13) At the present time, how confident are you that you will graduate with your chosen computing major?

Not at all confident; I am already planning to change my major

Not very confident; it is highly likely that I will change my major

There's about a 5% chance that I'll change my major.

I'm fairly confident that I will keep my current choice as my major.

I'm very confident that I will keep my current choice as my major.

14) Age in years:

15) Select your ethnicity:

Asian

African American



Hispanic/Latino  
Native Hawaiian/Pacific Islander  
White/Caucasian  
Native American/American Indian  
Multi-ethnic  
Other

16) Sex

Male  
Female