**Name:**

**Icebreaker**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **FIND SOMEONE WHO...**  **(write their name in the square)** | | | | |
| **Knows how to code/program computers** | **Likes going to the public library** | **Wants to go to grad school** | **Has gone bungee jumping, sky diving, or scuba diving** | **Has met a celebrity** |
| **Can play a musical instrument** | **Has more than 3 siblings** | **Listens to audio books** | **Loves to exercise** | **Has never gotten a speeding ticket** |
| **Takes public transportation to school** | **Is a parent** | **Is not a Psych Major** | **Has 1 or more pets** | **Is not from California** |
| **Dislikes chocolate** | **Loves roller coasters** | **Has more than 1000 followers on twitter** | **Can fluently speak a foreign language** | **Listens to music from other countries** |
| **Works on campus** | **Has been to the Grand Canyon** | **Is afraid of snakes** | **Checks Facebook daily** | **Has taken calculus** |

**Name: Date:**

**Classwork 1**

**Procedural vs. Conceptual Understanding of Math**

This class is designed to foster a *conceptual understanding of math.* What does that mean? In order to explore that question, please answer the following questions.

1. What do you think is a procedural understanding of math?
2. What do you think is a conceptual understanding of math?
3. Here is a math problem (already solved):
4. What is the procedural explanation for this problem?
5. What is the conceptual explanation of this problem?
6. Which was harder to do: procedural or conceptual? Why was it so difficult?

1. Is it worth it to learn the conceptual explanation? Why or why not

BONUS:

1. What is the conceptual explanation for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ?
2. What is the conceptual explanation for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ?

Connecting Concepts and Activities: Principles of Integration in Math and Science Pedagogy

To Project Participant:

You are invited to take part in a research project conducted by Ji Son, assistant professor at California State University, Los Angeles (CSULA). In this study we hope to learn more about how to integrate innovative teaching methods of teaching math and science (such as online assignments) with more traditional practices (such as in-person or textbook-based assignments). You are selected to participate in this study because you are a college student. We hope that our research will lead to a better understanding of how people learn and apply what they have learned to new situations.

You will have several opportunities to think about problems. You will either be answering questions online or in the materials presented to you in class.

You will receive course credit as determined by your instructor upon completion of this study.

There is minimal risk involved because these activities are similar to other learning activities. Reports resulting from this study will not identify you as a participant. All information gathered in this study will remain confidential and will be disclosed only with your permission or as required by law.

All collected data will only contain a code number and will not identify you by name. These data will be kept in a locked cabinet in Dr. Son’s laboratory at CSULA and will be stored for 3 years after the completion of the study. Consent forms will be kept in a separate locked location.

If you have any questions about this research at any time, please call Dr. Son at 323-343-2261 or write her at [json2@calstatela.edu](mailto:json2@calstatela.edu), Department of Psychology, 5151 State University Drive, Los Angeles, CA 90032.

THIS PROJECT HAS BEEN DETERMINED TO BE EXEMPT FROM REVIEW AND APPROVAL BY THE CALIFORNIA STATE UNIVERSITY, LOS ANGELES INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS IN RESEARCH.

**Expectations**

The general rule of thumb regarding college studying is, and has been for a long time, that for each class students should spend approximately 2-3 hrs of outside study time for each hour that they spend in class. Being a "full time student" (or "taking 12 units") means that 12 hours is class time and (at least) 24 hours is outside study time. The total (36 hours) is close to the equivalent of a full time job (~40 hours). This is the reason for the "full time" modifier in front of "student." For many students, this number is a surprise.

Our course is about 300 minutes per week (lecture + lab), so you should spend 600 minutes (or 10 hours) of outside study time. Just to complete the online homework, you should expect to set aside at least 6 hours per week for this course. If you have other responsibilities that prevent you from allocating this time outside of class, this may not be the right time for you to take this statistics course. Alternatively, you may want to enroll in a different section.

In this "flipped course," you will be spending outside time reading, answering questions, and doing coding exercises in the textbook (all on Canvas). This outside study time is crucial because during class time, we will be doing activities and having discussions based on that material.

Please take a moment to think about your weekly schedule. Write down what times you will commit to completing the online homework in the table below. **Your total time should add up to 6 hours** (outside of class/lab time). Note that you will need access to a computer with internet connection during these times.

\*Homework is due Sunday night at 11:30pm.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
| *Example:*  *11-11:30am*  *3-4pm*  *(1.5 hours)* |  |  |  |  |  |  |

If you would like to receive text reminders, please provide your phone number below. (By providing your phone number you are giving us permission to send you text reminders. Your number will be kept confidential and used solely for the purpose of sending reminders for this course. Messaging rates may apply.)

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Instructor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone Number: (\_\_\_\_\_\_\_\_\_\_)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**PSY3020 COHORT CONTRACT**

By signing below, I agree to fulfill the following requirements for participation in this course, and acknowledge that I understand the requirements for continued enrollment.  
  
Specifically:

I commit to successfully completing PSY3020 with the members of my cohort.

I commit to helping all of my cohort members understand statistics and complete PSY3020.

I commit to allocating at least 6 hours a week to complete all online and out-of-class assignments.

I will come to class everyday prepared to participate in all classroom activities.

I will contribute to creating a productive classroom atmosphere that supports everyone learning.

I will not discriminate against my fellow students and listen thoughtfully to their explanations. I can

benefit from listening to both correct and incorrect, vague and clear, fully formed and half-baked

expressions of ideas.

I will keep an open mind and a positive attitude, and will be willing to try out new learning strategies

and study skills.

MY SIGNATURE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PRINT NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**My Mini-Cohort Members:**

SIGNATURE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PRINT NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

SIGNATURE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PRINT NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

SIGNATURE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PRINT NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**TEAM NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Mini-Cohort Checklist:**

* Create a Team Name!
* Get contact info (phone number and e-mail)
* Start a group chat (either through text, e-mail, or any app you prefer)
* Check your calendars and schedule at least 4 tentative dates for group study sessions throughout the semester (in-person or virtually via Skype, FaceTime, etc.), and take a group photo each time you meet to receive extra credit!
  + Tentative group study dates:
    - 1) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    - 2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    - 3) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    - 4) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Help each other out throughout the semester!

