Cognition Lab

Lab 1

Part 1

Please open the Sakai folder "Labs / Lab 1". Download and complete "checklist.docx". Upload as "FirstnameLastname_Checklist" under Assignment 1.

Part 2

Please read the slides: scientific_method.pptx.
This presentation is the foundation of our course. As a review, complete the worksheet ScientificMethodsWorksheet.docx that you can find in the folder "Labs / Lab 1".

Part 3

Please open the Sakai folder "Labs" under Resources. Go to "Lab 1" and view the slides **line_length_background.pptx,** providing background for this lab. After you have finished, do the following exercise:

1) BRIEFLY define the following with your own words. If you are quoting a phrase from the slides, please be careful not to plagiarize and use quotation marks. Keep it simple: one sentence per item should be sufficient.

1. Psychophysics
2. Standard stimulus
3. Comparison stimulus
4. PSE
5. CE
6. Weber's Law
7. Difference Threshold

Part 4

We did the following during the first class so some of you may already have the program installed.

- Create a subfolder in your computer "Cognition lab" folder. Label it "Lab 1".
- Download linelength_3.py to the subfolder "Lab 1".

- Open linelength_3.py using PsychoPy.

If you need, refer to the video "RunningAnExerciseInPsychoPy". You can find it on Sakai in the "Videos" folder.

> ***Tips for opening a .py file in PsychoPy:***
>
> Remember to open the file from "coder view" in PsychoPy, and make sure to **open the .py file** (*not* the .pyc one, *if* there is already one in the folder. A .pyc file is generated each time you run a .py file – you can just ignore it).
> To access "coder view": go to "View" in the top tab and then click on "Open Coder view". If you are already in "coder view", and you click on "View", it will say "Go to Builder view" at the end of the drop down menu. Don't click on that and stay in "coder view".
> Once you are in coder view, **go to File/Open** and then navigate to the .py file.

Run three sessions of the program; each one will have 30 trials (in class we ran one session with three trials). For each session you will use one row of the parameters in the table below. So, for session 1 you will follow the parameters in the row corresponding to session 1.

Standard	Number of trials	Session Number	Participant	Mueller-Lyer
100	30	1	*Your initials*	N
200	30	2	*Your initials*	N
400	30	3	*Your initials*	N

- Open the excel files with the results; you will find them in the folder "Lab 1", as long as the PsychoPy file you ran was also in that folder. Then compute mean (i.e., the PSE) and SD (i.e., the difference threshold) for each value of the Standard.
  If you have any questions on how to calculate means or standard deviations, see the Excel example "meanAndStandardDeviation.pdf" that you can find under the Excel resources.

- After you have the two values of PSE (mean) and SD for each value of the Standard, create a line graph for the PSE and a line graph for the SD. The X axis will be the value of the Standard and the Y axis is the dependent variable (PSE or SD).

If you don't know how to create line graphs, please see the video "createLineGraphInExcel".

Save and upload to Sakai Assignment as "FirstnameLastname_CogLab_Lab1" – i.e. "JaneDoe_CogLab_Lab1" or "JohnSmith_CogLab_Lab1".