

COGNITION LAB - ONLINE

Psychology 306:90 – Spring 2016



Instructor	Email	Office
Bruno Sauce	sauce.bruno@rutgers.edu	Busch Psych, room 315

Office hours: Tuesdays 4-5 pm
(For most questions, you can also send me an email or ask in the chat room on Sakai)

Textbook: None. Required readings are on Sakai

Online meetings: Every Friday at 12-12:40 pm (except the two days of in-class meetings)

In-class meetings: January 29th and March 18th, 12-12:40 pm at room 105 of Busch Psychology Building

Course Description

In this online lab, we run various computer-based experiments that give you hands-on experience with the research methods and important findings in Cognition. These experiments also give you the opportunity to experience some cool phenomena firsthand, as well as the opportunity to generate and test hypotheses of your own. Throughout the semester, assignments and interactions with me and your classmates help you to improve basic skills in using software, analyzing data, communicating scientific findings, and at being more awesome in Science.

Learning Goals

1. Develop scientific thinking skills, including how to form and test hypotheses and how to draw sound conclusions from results.
2. Demonstrate some well-known cognitive phenomena by running lab experiments.
3. Learn-by-doing the main research methods of the field.
4. Learn how to analyze data and evaluate hypotheses.
5. Learn research communication skills.
6. Improve computer literacy.

This course has been certified as satisfying four of the Writing and Communication Learning Outcome Goals (including WCR and WCD) of the SAS Core Curriculum. Among other things, you will learn how to: a) Respond effectively to editorial feedback from peers, instructors, and/or supervisors through successive drafts and revision (WCR); b) Communicate effectively in modes appropriate to a discipline or area of inquiry (WCD); c) Evaluate and critically assess sources and use the conventions of attribution and citation correctly; d) Analyze and synthesize information and ideas from multiple sources to generate new insights.



Grading

The assignments in this course cover the three main intellectual activities in Science: proposing a new study (“Final Project”), reporting your study to the community (“Lab Reports” and “Final Project”), and reviewing the work of your peers (“Constructive Feedback”).

Online Participation: We have weekly online class meetings. During that time, you can ask questions, help your classmates, develop ideas, and get engaged with the course. Signing in and participating counts towards your grade.

Lab Reports: Every other week, you have to complete a written Lab Report related to the new material and the computer-based experiment from the previous week. This assignment is individual.

Constructive Feedback: You have to revise a Lab Report from one of your classmates (chosen randomly) following the guidelines given in class. Then, I grade the quality of the feedback, and the author receives the revision back (this does not change the original grade for the report itself, so no need for you to be nice). Like the Lab Reports, this assignment is individual. There are two in total; one for each Lab Report from later on in the semester.

Final Project: There is a final capstone project based on concepts and experiments seen in the course. The project requires you to use many of the skills you learned during the semester, including proposing a new hypothesis, designing an experiment, collecting and analyzing data, and writing a full report (written in the style of journal articles in the field). More details about the Final Project later in the semester. (These details depend on how the class proceeds and what material is covered.) The written report is individual, although the proposal and the experiments can be a group activity.

Grade calculation

The maximum total is 100.

Assignment	Maximum Points
Online Participation	10
Lab Reports	30 (Total)
Constructive Feedback	10 (5 each)
Final Project	50

Academic Integrity and data collection

You are required to abide by the Rutgers policy on academic integrity. You can view it at <http://academicintegrity.rutgers.edu/academic-integrity-at-rutgers/>

The policy states, among other things, that “every Rutgers University student...make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of unsanctioned materials or unsanctioned collaboration.” This includes having someone else run your

experiment, having someone else read the material for you, and having someone else run the analysis for you. Also, keep in mind that university policy does not allow reusing your own material from classes taken previously or concurrently.

I always use Turn-it-in for assignments to check for plagiarism. If I believe there was any violation of integrity, this will be investigated in accordance with the university's procedures and policies.

Data Collection: In this course, we are doing lab experiments, not original research. All data for assignments as well as the final project should be collected with either you or your classmates serving as the participants. Collecting data from anyone else (roommates, friends, family members) is never permitted.

Additional Stuff

The software we use to run all experiments in this lab is called PsychoPy. It is free, and you can find instructions on our Sakai page on how to install it. Also, PsychoPy is available on all machines (PC and Apple) in University Computing Labs. For a list of their locations, see: <https://oit-nb.rutgers.edu/labs>

If you miss any assignment, you need to provide me with a reasonable explanation in order to replace it.

Late submissions lose 10% of the points for the assignment.

If you want to do extra work in order to get a better grade, do it during the course, not after it is over. Study, ask questions, prepare for the assignments, and get engaged!

And remember: A grade is not something given to you; it is something you earn.

At last, because you had the patience to read this syllabus, here is a quote for your delight:

“The truth may be puzzling. It may take some work to grapple with. It may be counterintuitive. It may contradict deeply held prejudices. It may not be consonant with what we desperately want to be true. But our preferences do not determine what's true. We have a method, and that method helps us to reach not absolute truth, only asymptotic approaches to the truth — never there, just closer and closer, always finding vast new oceans of undiscovered possibilities. Cleverly designed experiments are the key.”

– Carl Sagan in "Wonder and Skepticism". Skeptical Inquirer 19 (1), 1995.