Cognition Lab

01:830:306/01 Spring 2020
Busch Psychology Building, Rm 101
Weekly Meetings: Friday 10:20AM to 11:00PM

Instructor: Serena De Stefani
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Weekly Meetings: **Friday 10:20AM to 11:00AM** (MANDATORY)
Office Hours: *By Appointment, Busch Psychology Room 134A or College Ave*.

In our lab we will be doing a number of exercises and studies that will give you hands on experience with the research methods and important findings in Cognitive Psychology. You will have the opportunity of experiencing some phenomena firsthand, as well as the opportunity to generate and test some hypotheses of your own. You'll also be able to improve some basic skills in using software, analyzing data and communicating scientific findings.

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 and perceptual phenomena by running lab exercises.
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 – (with the aid of the Datacamp platform)

This laboratory class is meant to serve as a companion to the lecture class PSYCH-305. The conceptual and theoretical basis for the exercises and demonstrations are developed in lecture. For this reason, concurrent or past registration in PSYCH-305 is required.



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

DATE	TOPIC	ASSIGNMENT DUE
Friday 1/31	Line Length – Lab Introduction	Lab 1 due on Wed 2/5
Friday 2/7	Stroop – Procedure	Lab 2 due on Wed 2/12
Friday 2/14	VSTM – Methods – Results	Lab 3 due on Wed 2/19
Friday 2/21	Mental Rotation – Introduction	Lab 4 due on Wed 2/26
Friday 2/28	Reverse Stroop – Discussion	Lab 5 due on Wed 3/4
Friday 3/6	Tone Discrimination – Abstract – PROPOSAL	Lab 6 due on Sun 3/29
Friday 3/27	Ethics – Instructions – Debriefing	Lab 7 due on Wed 4/1
Friday 4/3	Data Collection – Data Analysis	Lab 8 due on Wed 4/8
Friday 4/3	Pseudoscience – Methods	Lab 9 due on Wed 4/15
Friday 4/10	Replication Crisis – Results	Lab 10 due on Wed 4/22
Friday 4/17	Eugenics – Introduction	Lab 11 due on Wed 4/29
Friday 4/24	Persuasion/Career – Disc. Ref. Abs.	*Lab 13 due on Sun 5/3**
		Final Project due Wed 5/6

The experiments we will cover are in red; assignments related to the final project are in blue; topics related to science and its role in today's society are in green.
*The last lab is due on Sunday because the complete final project is due on Wednesday

Class website:

- All relevant course information will be posted on the Sakai website, including experiment files, slides, videos, and journal articles.
- On the class website you can also find this syllabus and the lab assignments.
- **All uploaded assignments must be .doc, .docx or .pdf. All uploaded data must be in excel.**
- Grades will be posted on Sakai's gradebook.

Time Management:

Note that Rutgers University expects the **median** student to spend 3 hours per week on lab classes. Therefore, you should plan to spend 3 hours per week on this class (that includes the time we spend in class.) You should also be aware that any given week may take you more time if you find the material difficult, or less if you've covered it in previous classes.

Computers:

Lab exercises require computers that run either Windows or Macintosh operating systems. Lab software is not compatible with operating systems used on notebooks, tablets, or iPads. Lab exercises may be run on computers in a university computer lab (see https://oit-nb.rutgers.edu/service/computer-labs-0 for a list of university computer lab locations). If you choose to run the exercises in a computer lab, be sure to bring a thumb-drive so that

you can keep copies of your work. In addition, some of the exercises may require use of headphones.

Data Collection:
In this course we are doing lab exercises, not original research. All data for weekly exercises as well as the final project will be collected with either you or your classmates serving as the participants. **Collecting data from anyone else (roommates, friends, family members, etc.) is not permitted.**

Grading:
In order to pass this class, you must do the weekly assignments. In addition, you must do the final project. **If you do not complete both of these aspects of the course, you will automatically fail the course**.

Your final grade will be based on three things:

1. Attendance: 10%
2. Weekly lab assignments (REQUIRED - see above): 40%
3. An original project report in APA style (REQUIRED - see above): 50%

Every assignment will count towards your grade. There are no tests or quizzes.

The criteria for grading your work will be:
- Effort and class participation
- Demonstration of progress in understanding and using software tools
- Clarity of graphs
- Clarity of writing
- Demonstration of understanding basic perceptual concepts introduced in the labs

Final Project:
The final project is the writing of a full laboratory report in APA style based on an original experiment carried out in class during the final weeks of the semester.

Weekly Assignments Grading Policy:
Assignments will be graded according to the scale below. If you hand the assignments in on time, you may have the option to rewrite the assignment depending on your grade. You are strongly encouraged to take advantage of this option. The revised version is due within one week of me handing back the graded assignment. The revised report will also be graded. Revising an assignment DOES NOT guarantee you a higher grade: you must still follow the assignment and make the necessary corrections. No revisions will be

accepted after this one-week time period, and no subsequent revisions will be accepted after the first revision.
The grade you earn is as follows:

3: Excellent work, no rewrite needed
2: Adequate work, but there are mistakes and you would benefit from a rewrite
1: Definite problems or needs improvement; you are likely to do poorly without a rewrite
0: Fail, requires redo

All laboratory assignments and reports must be completed by the individual student. Collaborative reports will be given an F grade. Please see Academic Dishonesty Policy below.

Late Assignments:

If you do not turn in an assignment on time, you will lose the option to revise it. However, you can still receive partial credit if you submit it by the end of the revision period.

When the revision assignment folder has been posted in the Assignments tab on Sakai, late assignments must be submitted there, and the maximum grade you can receive will be a 2. If your late assignment is not submitted by the revision due date it will become a 0 and there will be no further opportunities to receive credit for it.
Failure to submit assignments will lead to a failing grade in the class. During the semester, you are allowed to miss one assignment only without penalty.

Attendance Policy, Absebse and Extensions:

If you are going to miss a meeting for a legitimate reason (e.g. illness, religious holiday) please let me know *in advance* and send an official excuse note (e.g. doctor's note). If you are more than 20 minutes late you will be marked down as having an unexcused absence.
Likewise, if you need an extension, you need to let me know *in advance*. There is *one* hard deadline in this course: the in-class data collection.

Academic Dishonesty Policy:

In science, there is absolutely no room for fraud or untruth. Our job as scientists is to search out facts, not just for ourselves but for society as a whole. Consequently, in the work you submit, falsifying, plagiarism, or copying without attribution will not be tolerated. Additionally, re-use of assignments from other classes will not be permitted. Intentional ethical violations will be handled in accordance with the university's academic integrity policy. The final assignment will be submitted to the Turn-it-in

system, where its originality will be verified. Please check the school guidelines for further clarification of violations.