

**Cognition Lab – 01:830:306:94**

Main Canvas page <https://canvas.rutgers.edu/>

**Fall 2020****Meeting Days, Times, and Venues**

Since this is an asynchronized class, you are not expected to join the class at a specific time. But I will hold an office hour on Thursday 3:20-4:40 pm. If you have any question, but you can't attend the office hour at that time, please send me an email to schedule a time to meet.

**Instructor's Name**

Contact information: Mengxue Kang([mk1465@psych.rutgers.edu](mailto:mk1465@psych.rutgers.edu)). I will reply to you within 48 hours.

**Office hours:** Thursday 3:20-4:40 pm. If you can't make it, please send me an email to schedule a time to meet.

*Faculty Coordinator: Dr. Mimi Phan ([mphan@scarletmail.rutgers.edu](mailto:mphan@scarletmail.rutgers.edu))*

*Faculty Supervisor: Dr. Melchi Michel ([melchi.michel@rutgers.edu](mailto:melchi.michel@rutgers.edu))*

**List of Required Books &/or Materials**

Required readings will be provided on CANVAS throughout the semester

**Technology/Software Requirements:**Software for Remote Learning:

Rutgers Box account: (<https://box.rutgers.edu/>)

Rutgers Zoom Account: (<https://it.rutgers.edu/zoom/>)

Technology for Remote Learning:

Computer: Laptop or desktop computer.

Internet Connectivity: Preferably a high-speed connection. You may also use a wireless hotspot through your mobile provider.

Microphone (optional): This may be built into your device, but an external microphone or headset will provide better sound.

Webcam (optional): Many computers have one built in, but you can easily connect an external USB camera.

Computers:

Lab exercises require computers that run either Windows or Macintosh operating systems. Lab software is not compatible with operating systems used on android tablets, Chromebook or I pads.

Note:

Learning remotely presents new challenges. For assistance with learning how to address these challenges, please consult the resources available here:

[https://rlc.rutgers.edu/remote\\_instruction](https://rlc.rutgers.edu/remote_instruction)

Please visit the [Rutgers Student Tech Guide](#) page for resources available to all students. If you do not have the appropriate technology for financial

reasons, please email Dean of Students [deanofstudents@echo.rutgers.edu](mailto:deanofstudents@echo.rutgers.edu) for assistance. If you are facing other financial hardships, please visit the Office of Financial Aid at <https://financialaid.rutgers.edu/>.

## Learning Goals



The aim of this course is to acquaint students with scientific research within the context of learning psychology. We will be doing various lab exercises that will give you hands on experience with the research methods and important findings in cognitive psychology. These exercises will give you opportunity to experience some phenomena first hand, 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. Upon successful completion of this course, students will:

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.

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. Specifically, students will be able 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.

## The Division of Student Affairs Diversity & Inclusion Statement

Excerpted (<http://inclusion.rutgers.edu/>):

*"The Division of Student Affairs works to create an environment of inclusion which respects and affirms the inherent dignity, value, and uniqueness of all individuals, communities and perspectives. Our practices reflect awareness and understanding of the complexity of identity and the increasing interconnectedness of our world. It is our responsibility to promote and maintain a community of compassion, embracing the rich dimensions of diversity, and facilitating opportunities for understanding and the expression of both individual and shared truths."*

## Current Academic Integrity Policy and Honor Pledge:

Overview: Rutgers University takes academic dishonesty very seriously. By enrolling in this course, you assume responsibility for familiarizing yourself with the Academic Integrity Policy and the possible penalties (including suspension and expulsion) for violating the policy. As per the policy, all suspected violations will be reported to the Office of Student Conduct. Academic dishonesty includes (but is not limited to):

- Cheating
- Plagiarism
- Aiding others in committing a violation or allowing others to use your work
- Failure to cite sources correctly
- Fabrication
- Using another person's ideas or words without attribution—re-using a previous assignment
- Unauthorized collaboration
- Sabotaging another student's work in doubt, please consult the instructor

Honor pledge: All students will need to sign the Rutgers Honor Pledge on every major exam, assignment, or other assessment as follows:

- *On my honor, I have neither received nor given any unauthorized assistance on this examination (assignment).*

Summary:

<http://nbacademicintegrity.rutgers.edu/home-2/academic-integrity-policy/>

Resources for Students:

<http://nbacademicintegrity.rutgers.edu/home-2/for-students/>

### **Self-Reporting Absence Application:**

Students are expected to attend all classes; if you expect to miss one or two classes, please use the University absence reporting website <https://sims.rutgers.edu/ssra/> to indicate the date and reason for your absence. An email is automatically sent to me.

**Please note:** Since this is an asynchronized section, you are not expected to attend the class at a specific time. But you have to submit your homework on time.

### **Course Structure and Requirements**

**Syllabus** \*Note that class meetings will not start until the 3<sup>rd</sup> week of Rutgers NB scheduled classes

#### **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 never permitted.

Date	Week	Assignments
------	------	-------------

3-Aug	week1	No Class
10-Sep	week2	No Class
17-Sep	week3	Intro to course, Syllabus, PsychoPy, Basics of the scientific method
24-Sep	week4	Psychophysical methods; Review of statistics: Mean and Standard Deviation; Expt. 0. Line length
1-Oct	week5	Basics on scientific writing: Style, Intro, and Methods, citations; Expt. 01. Divided Attention
8-Oct	week6	Basics on scientific writing: Results and Discussion Lab Report 1-Intro, Methods, Citations only –15 points (on Expt1)
15-Oct	week7	Background for experiment “Mental Rotation”. Expt. 02. Mental Rotation
22-Oct	week8	Background for experiment “Attentional Blink” Expt. 03 Attentional Blink
29-Oct	week9	Background for experiment “Stroop Effect”. Expt. 04. Stroop Effect Lab Report 2 –Results, Discussion, Citations only –15 points (on Expt2)
5-Nov	week10	Writing Workshop for Lab Report 3 (Lab Report 3 Intro, Citations, et al.)
12-Nov	week11	Recap/data analysis & review (Lab Report 3 Methods & Results)
19-Nov	week12	Integration & Overview (Lab Report 3 Discussion)
26-Nov	week13	**NO CLASS** (Thanksgiving Break) Due: 2-3 pages Experimental Critique and thought experiment
3-Dec	week14	Open Office Hours (Lab Report 3 Intro, Citations, et al.)
10-Dec	week15	Open Office Hours. Lab report 3 (on Expt3) FINAL due by Fri 12/11 at 11:59 pm **note unusual due date**

**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

#### Standardized Rubric Across LPL Sections

- 15 points Lab Report 1 (Experiment 1) Intro, Methods, Citations only
- 15 points Lab Report 2 (Experiment 2) Results, Discussion, Citations only
- 30 points Lab Report 3 (Experiment 3) Full lab report
- 15 points Take Home Quizzes (5 points each)
- 15 points 2-3 pages Experimental Critique and thought experiment
- 10 points Peer Review

#### Section Specific

##### Peer Review:

Students will conduct peer review sessions throughout the semester. The goal of these sessions is to practice your newly developed scientific writing skills by providing constructive feedback to your fellow classmates' lab reports.

##### Quizzes:

These quizzes may be based on the articles for each experiment, APA style, and/or the basic statistics used with our data throughout the semester.

**Student-Wellness Services: All of these services are being provided remotely during Fall 2020.**

#### **Counseling, ADAP & Psychiatric Services (CAPS)**

**(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ <http://health.rutgers.edu/medical-counseling-services/counseling/>**

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professionals within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community, and consultation and collaboration with campus partners.

**Crisis Intervention :** <http://health.rutgers.edu/medical-counseling-services/counseling/crisis-intervention/>

**Report a Concern:** <http://health.rutgers.edu/do-something-to-help/>

#### **Violence Prevention & Victim Assistance (VPVA)**

**(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / [www.vpva.rutgers.edu/](http://www.vpva.rutgers.edu/)**

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

**Disability Services**

**(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>**  
Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.