

Cognition Lab Section 01
01:830:306:01 Spring 2012
Monday 8:40AM -11:40AM
Busch Psychology Building, Room 105

Instructor

Seha Kim
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Office Hours: By appointment; Psychology Building, Room A106

Goal

The aim of this course is to provide hands-on experience and training in the *experimental designs* and *analytical methods* that are common in research in cognitive psychology. The course will be devoted to (1) running in-class experiments, (2) analyzing the data, (3) interpreting the results, and (4) writing lab reports.

Course Material

No text book. All course materials can be found on <http://sakai.rutgers.edu> after you log in. It is expected that you *print out Instruction materials before class*. (The printer in the classroom is for printing data-related materials *only*.)

Exam

No exam for this class.

Attendance

- Attendance is *mandatory*. There is *no* make-up lab unless the absence is because of religious observation or participation in intercollegiate athletics.
- If you miss a class, you must return official documents (i.e. an official excuse note from the Dean, etc.) to be excused for class exercise.
- Contact instructor *earlier* if you have any problem of your attendance.
- If you have more than two unexcused absences, you will fail the class.

Schedule

Each lab follows a two-week cycle.

- Week 1
 - Theoretical background and motivation of the week's experiment
 - Students run the experiment and act as subjects in the experiment.
- Week 2
 - Analysis methods for the experiment including
 - Students analyze and interpret their results of the first week with the methods.

The schedule of units is as follows. Amendments may be made as the course progresses.

Date	Lab		Assignment
01/23	Lab 1: Categorization and Typicality	Week 1	Abstract section (Due: 02/05)
01/30		Week 2	
02/06	Lab 2: Mental Rotation	Week 1	Introduction section (Due: 02/19)
02/13		Week 2	
02/20	Lab 3: Numerical Estimation	Week 1	Methods section (Due: 03/04)
02/27		Week 2	
03/05	Lab 4: Category Learning	Week 1	Discussion section (Due: 03/25)
03/12		No Class (Spring Recess)	
03/19		Week 2	
03/26	Lab 5: Decision Making	Week 1	Results section (Due: 04/08)
04/02		Week 2	
04/09	Lab 6: Working Memory	Week 1	Final full lab report (Due: 04/22)
04/16		Week 2	
04/23	Reserved for class changes/amendments		

Grading

	Points
12 Class Exercises	35
5 Assignments	35
Final Report	30
Total	100

Letter Grade

Point Grade	Letter Grade
90	A
85	B+
80	B
75	C+
70	C
60	D
Below 60	F

Grade for this course will *not* be curved or scaled.

Class Exercise

- For each class, the instruction for running experiment/analyzing data will be provided on Sakai. Students follow the instruction, (1) to set up the experiment, (2) to act as a subject, and (3) to analyze the data.
- At each class, a quiz will be distributed. Students are asked to answer the questions about (1) design, (2) data analysis result, and (3) various exercise for writing lab report.

- Each class exercise including the quiz is finished in the class room and is confirmed by instructor before each student leaves the class room.
- Each class exercise will be graded on the scale of Pass (3 points) / Fail (0 point) except the first class (Pass (2 points) / Fail (0 point)).

Assignment

- For each lab unit, a partial section of a lab report (i.e. an abstract, an introduction, a methods section, etc.) is asked.
- Return the assignment on Sakai>Assignments. Late assignments get 0 point.
- Writing assignments are graded on the following scale:
 - P+ : excellent work (7 points + 3 extras, thus 10 points)
 - P : good, pass (7 points)
 - P- : minor problems, needs improvement (4 points)
 - F : fail, required redo (0 point)
- Revision option:
 - Student can have one more chance to revise the report to get a P *in three days* of the receipt of graded assignment.
 - No subsequent revisions will be accepted after the first revision.
 - You may not revise a P to receive a P+.
 - No revision for final report.
- The email inquiries about assignments and final project in 24 hours before the due will NOT be answered. Start assignments earlier.

Final Report

- For the last lab (Working Memory lab), students are asked to write a complete lab report that enables students integrate the skills throughout the semester as the final project of this class.
- Final project is graded on the following scale:
 - A (30 points) / B (25 points) / C (20 points) / D (15 points) / F (0 point)

Academic Integrity Policy

- *Any outside sources* must be appropriately referenced. Cutting and pasting from the Internet sources and rewording other's text without proper citation are examples of plagiarism. Be careful not to forget to put proper citation and reference of *any* sources that is not your own.
- All writing assignments and reports that students turn in must be done their own work. Students should not work collaboratively on assignments.
- Plagiarism results in failing the course.
- See Rutgers' policy on Academic Integrity at <http://academicintegrity.rutgers.edu/>.

Classroom Decorum

- Cell phones should be off.
- No web surfing in the class room.

** If you decide to stay enrolled in this class after receiving this syllabus, I will assume you have read the entire syllabus and have agreed to all the policies outlined.*

SYLLABUS
Cognition Lab: Spring 2012
1:830:306:05
Nora Isacoff (nisacoff@ruccs.rutgers.edu)
Wednesday 12-3 pm in Psych 105

You are responsible for knowing all of the information contained in this syllabus. Please read it fully and refer to it throughout the semester, and make sure you understand all of the information before coming to class or beginning any assignments.

Prerequisites: In order to take this class, you should have a background in quantitative methods (statistics), a basic understanding of general psychology (e.g. general methods and approaches), and should either have completed or currently be enrolled in Cognition. We will review concepts and statistical methods in class.

General Aims: The aim of this course is to provide hands-on experience and training in some of the methodologies, experimental designs, and analytical methods that are common in research in cognitive psychology. The course will be devoted to situating experiments in the context of previous work (introduction), running some simple in-class experiments (methods), analyzing the data (results), and interpreting the results (discussion).

Writing Component: Although this class does not currently count towards your SAS writing credits, there is a significant writing component. SAS suggests the following goals for classes that include writing (copied verbatim):

1. Communicate complex ideas effectively, in standard written English, to a general audience, and respond effectively to editorial feedback from peers, instructors, &/or supervisors through successive drafts & revision.
2. Communicate effectively in modes appropriate to a discipline or area of inquiry.
3. Evaluate and critically assess sources and use the conventions of attribution and citation correctly.
4. Analyze and synthesize information and ideas from multiple sources to generate new insights.

What I like best about this class:

1. A chance to see how experiments are really done! How do psychologists really come up with the things you learn about? How do you know if your hypothesis is right?
2. A chance to do things on your own. . . But also to collaborate.
3. For researchers, it's all about getting published. Practice putting together your results in a clear and convincing way.

Schedule: The labs follow a two-week cycle. During the first week of each unit, students will act as subjects in an experiment. I will give some of the theoretical background and

motivation of the week's experiment, and explain the experimental design. During the second week of each unit, the class will analyze and interpret the results. I will discuss the relevant statistical methods, both in general and as they apply to the results at hand. The assignment, part of a lab report, is generally due in class 2 weeks from the start of each lab. (Occasionally I will have you hand in something small during class as well, to check that everything is clear, and this will be worth 1 or 2 of that lab's 10 points.)

The schedule of units is as follows:

Lab 1: **Categorization and typicality**

Experiment: Jan 25

Analyses: Feb 1

Abstract due: Feb 8 (10% of grade)

Lab 2: **Mental rotation**

Experiment: Feb 8

Analyses: Feb 15

Introduction (including references) due: Feb 22 (10% of grade. -2 for no refs)

Lab 3: **Numerical estimation**

Experiment: Feb 22

Analyses: Feb 29

In class assignment: Feb 29 (10% of grade)

Methods due: March 7 (10% of grade)

Lab 4: **Category learning**

Experiment: March 7

NO CLASS MARCH 14: SPRING BREAK

Analyses: March 21

Results due: March 28 (5% of grade)

Discussion (including references) due: March 28 (10% of grade. -2 for no refs)

Lab 5: **Decision making**

Experiment: March 28

Data brought in: April 4 (5% of grade)

Analyses & results done in class: April 4 (5% of grade)

Lab 6: **Working memory**

Experiment: April 11

Analyses: April 18

Optional editing workshop: April 18

Full lab report: due April 25 (NO CLASS, due via turnitin on Sakai by 12 p.m.)

Final Lab Report:

Worth 35% of final grade and based only on the "Working Memory" lab.

Breakdown of Grade:

Abstract (7 points)

Introduction (7 points)

Methods (7 points)

Results (7 points)

Discussion (7 points)

References (not worth any points, but you will lose 7 points if you don't include this section)

Basic Rules:

Attendance is mandatory, for obvious reasons. All assignments are due IN HARD COPY at the start of class on the due date. The only assignment that should be handed in via turnitin on Sakai is the final assignment, since there is no class that day. I'll hand assignments back the following class, and I'll post your grades on Sakai as soon as I've entered them.

Feel *very* free to ask questions throughout the lecture portion!! Please let me know if you'd like to go over something again. If you don't understand something (and you've been paying attention), that means most of your classmates don't either, so let's get it cleared up right away.

Absences/late assignment will **only** be excused if for serious illness, death in the family, religious obligation, etc. If your excuse is known ahead of time (e.g. religious obligation) you must let me know ahead of time. If you cannot let me know ahead of time, you must let me know as soon as possible after the absence or late assignment and preferably give me evidence (e.g. a doctor's note). We will then try to work out a reasonable way for you to make up the missed class or assignment. However, multiple missed classes or assignments may not be able to be made up, even if you have a legitimate excuse, simply because of the hands-on nature of the class. Communicating with me about this is your best bet for working something out.

You **must** be on time to class. I know the bus system sometimes makes this difficult but realize that we will start on time, and that if you come in 5 minutes late, you may miss crucial information. Anything you miss is **your responsibility**, and if you're sufficiently late/consistently late, I may not allow you to begin a lab. (It's not fair to hold back the rest of the class or have to explain things multiple times because of one late student.)

When you come in there will be a sign-in book on my desk. Print and sign your name. (Signing someone else's name counts as cheating. . . not something you want to do!). You can also pick up graded work from my desk and hand in work that is due.

No printing while I'm lecturing/explaining things to the class. The printer is extremely noisy. If you need to print something, you may do so before class starts or during a time when I'm not talking to the class as a whole.

Computer rules: Please do not go on facebook, twitter, gmail, youtube, etc. during class. During the short lectures, only use the computer to follow along with the slides and take notes. The slides are only guidelines, but if you miss what I say, you're going to have a lot of trouble when it comes time to do your assignments. If I see you going on these

sites, I may ask you to leave the lab, and you will not be allowed to make up missed work.

Saving your work: You must sit in the same seat every class. You must save your work in 2 places.

1. The folder on the **desktop** that corresponds to your section
2. On a flash drive or by emailing it to yourself.

(Don't come to the second week of a lab, realize all your work has been deleted, and have to start over.)

Plagiarism: You can view the complete academic integrity policy here: <http://academicintegrity.rutgers.edu/integrity.shtml>

You are free to DISCUSS your work with your classmates, but you must write up your work independently. It is very obvious when two students have written up their work together or copied from each other.

If you are including an idea that you got from another author, you don't need to put it in quotes, but rather, you cite it at the end of the sentence like this (Smith, 2012).

If you are found plagiarizing you will get a 0 for that assignment. Let me know if you have questions about what is/isn't allowed.

Extra Help: Ask if you need extra help! You can always contact me at nisacoff@ruccs.rutgers.edu. You're welcome to send me drafts or questions regarding your assignments. However, realize that the **earlier** you send something, the more likely you will get a response in time. I can't promise you that I'll have time to comment on a draft sent the night before an assignment is due. If you want to go over something in person, we can arrange to meet before or after class, or at another time.

Extra Credit: During the lecture portion, I'll often ask for volunteers to answer questions or write something on the board. If you contribute, you'll get 1 extra credit point added to your final grade, up to 1 point per class.

Cognition Lab

01:830:306:06 Spring 2012

Busch Psychology Building, Rm 105

Thursday 12:00 PM – 3:00 PM

Instructor: Aaron Kheifets

E-mail: kheifets@rci.rutgers.edu

Office Hours: By appointment

General goals for the course:

1. To provide an opportunity to experience cognitive phenomena first hand.
2. To learn how to design, conduct, analyze, and write-up experiments.
3. To learn how to use software tools to analyze and plot data.

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.

Grading:

Your final grade will be based on three things:

1. Weekly lab assignments
2. The final project (original project report and presentation completed during the last several class meetings)

Every assignment will count towards your grade. There are no tests or quizzes planned.
Grades for this course will not be curved or scaled.

The criteria for grading your work will be:

- Effort and class participation
- Demonstration of proficiency in 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 based on an original experiment carried out in class during the final weeks of the semester. This final will be half your grade for the course (the other half being weekly assignments).

Weekly Assignments:

We will be working on labs at each class meeting. After each lab is completed (data collection and analysis), you will be assigned a write-up of the lab that is due at the beginning of the next class period. Write-ups will often consist of brief (1-2 page) reports on methods, raw data, data analysis (graphs, charts, statistical tests, etc.), results and conclusions.

Students will have a one-week window in which they can revise a failing homework to get a better grade. No revisions of a failed assignment will be accepted after this one-week delay, and no subsequent revisions will be accepted after the first revision, although I will be available to meet with you to discuss the material and your performance. Each weekly assignment will be worth ten percent of your grade (total: fifty percent).

All laboratory assignments and reports must be completed by the individual student. Collaborative reports will be given a 0 grade. Please see Academic Dishonesty Policy below.

Attendance Policy:

A missed class is a missed class. No absences will be excused for any reason and therefore students will be responsible for all work in the course.

You must arrive on time to class. Excessive lateness prevents you from learning about the goals and content of the lab projects. If you are more than 15 minutes late you will not be allowed to enter and participate that day and you will be counted as absent.

Schedule of Labs:

The following is a rough schedule of the course. Changes and amendments may be made as the course progresses.

January 26	Introduction to the course, Lab 1: Categorization & Typicality
February 2	Lab 1: Categorization & Typicality (continued)
February 9	Lab 2: Mental Rotation
February 16	Lab 2: Mental Rotation (continued)

February 23	Lab 3: Numerical Estimation
March 1	Lab 3: Numerical Estimation (continued)
March 8	Lab 4: Category Learning
March 15	NO LAB spring break
March 22	Lab 4: Category Learning (continued)
March 29	Lab 5: Decision Making
April 5	Lab 5: Decision Making (continued)
April 12	Lab 6: Working Memory
April 19	Lab 6: Working Memory (continued)
April 26	Turn in and present FINAL PROJECTS
May 3	NO LAB – finals, see http://scheduling.rutgers.edu/calendar.shtml

Academic Dishonesty Policy:

Absolutely no dishonesty will be tolerated. Reading outside sources is a very good thing, so by all means quote them and comment on them in your work, but be completely honest about where your information is coming from. If you present something as someone else's idea and then comment on it, you will be rewarded. If you present other peoples' ideas as your own, you will be severely punished (see Rutgers Academic Dishonesty Policy below). Cite anything and everything. If there is any doubt about whether or not to cite something, the answer is that it should be cited. If you fail to give credit to the original source, it will be impossible to convince anyone that this was an accident after you turn it in. Do it before you turn in your work!

Current Academic Integrity Policy: <http://academicintegrity.rutgers.edu/integrity.shtml>

Violations include: cheating, fabrication, plagiarism, denying others access to information or material, and facilitating violations of academic integrity.

All course materials can be found on <http://sakai.rutgers.edu> after you log in. It is expected that you print out ALL materials before class.

If you decide to stay enrolled in this class after receiving this syllabus, I will assume you have read the entire syllabus and have agreed to all the policies outlined.

01:830:306:09
Spring 2012

Cognition Lab

TA: Peter Pantelis

Contact: by e-mail, petercp@eden.rutgers.edu

Syllabus

Class Time/Location: Tuesdays, 6:40pm-9:30pm, Psych Building Rm 105
TA Office Hours: by appointment only

Overview: The aim of this course is to provide hands-on experience and training in some of the methodologies, experimental designs, and analytical methods that are commonly applied to research in cognitive psychology. Most of the course will be devoted to running some simple in-class experiments, analyzing the data, and interpreting the results.

Handouts: Online versions of handouts can be found at

<http://ruccs.rutgers.edu/~jacob/Psych306/labman.html>

Sakai will be a *very* important tool for communication within the class and the dissemination of announcements and materials, so please check it periodically. Lecture slides will contain important information for the completion of assignments, and will be posted to sakai after class. Written assignments will all be submitted to sakai: *I request that they be submitted in PDF format.*

Schedule: The labs generally follow a two-week cycle. During the first week of each unit, students will act as subjects in an experiment. The TA will give some of the theoretical background and motivation of the week's experiment, and explain the experimental design. During the second week, the class will analyze and interpret the results. The TA will discuss the relevant statistical methods, both in general and as they apply to the results at hand.

The schedule of units is as follows (subject to modification as the TA's discretion). The associated writing assignment for each unit is shown in parentheses:

- Lab 1: **Categorization and typicality (Abstract)**
- Lab 2: **Mental rotation (Introduction)**
- Lab 3: **Numerical Estimation (Methods)**
- Lab 4: **Category Learning (Results)**
- Lab 5: **Decision making (Discussion)**
- Lab 6: **Working memory (Full lab report)**

Grading: Each unit will include a writing assignment, usually one section of a lab report on the experiment conducted in class. The assignment will be explained in the handouts and discussed at lab. 50% of the final grade will be based on these five partial lab reports, and attendance (10% per unit) and 50% will be based on the final assignment, a full write-up of our final experiment. This final paper will be tentatively due **April 30 at noon**, the final day of classes (though this is subject to change).

Attendance: Attendance is mandatory because so much of the class depends on the hands-on experience of running in the experiments. In addition, you will work on data analysis and written assignments during class, so that if questions come up you will have the opportunity to ask for help. If you need to miss a class with a good excuse, please provide me with documentation. Otherwise, your grade may be reduced.

Current Academic Integrity Policy:

<http://academicintegrity.rutgers.edu/integrity.shtml>

Violations include: cheating, fabrication, plagiarism, denying others access to information or material, and facilitating violations of academic integrity.