

**Psychology 353: Laboratory in Cognition and Memory**  
**Spring 2017: CRN 20289 and CRN 27534**  
**MW 3-4:50**  
**Classroom: 2057 BSB**

**Course Information:** 3 hours. Prerequisite(s): PSCH 343, and credit or concurrent registration in PSCH 352. To be properly registered, students must enroll in both Lecture/Discussion and Laboratory parts of the course. Only registered students may attend. Completion of PSCH 352 is expected so that you have the necessary background knowledge for the laboratory course. If you are currently taking 352, you will need to read chapters from your textbook before reading the assigned journal articles to have enough background for the activities we do in this laboratory. Use the index to find the chapter in your textbook that provides you with background on the topic (e.g. memory, language, text comprehension, problem solving, reasoning or decision making) once articles are announced.

**Registration Restriction:** Restricted to Neuroscience or Psychology major(s)

**Instructor: Jennifer Wiley**

Office: 1054C BSB Phone: (312) 355-2501 Email: [jwiley@uic.edu](mailto:jwiley@uic.edu)

Office Hours: by appointment

**TA: Chelsea Perschon**

Office: B143 BSB Email: [cpersc2@uic.edu](mailto:cpersc2@uic.edu)

Office Hours: 1-2 Mondays or by appointment

**Special Bonus TA: Tim George**

**Purpose of Course**

The purpose of this course is to give students first-hand experience with experimentation in cognition and mastering APA style.

For the first part of the course, students will gain experience in running experiments in cognitive topics including memory, language, text comprehension, problem solving, reasoning or decision making. For each experiment, students will act as participants and then take the role of researchers responsible for entering and interpreting data, and reporting experimental results in APA format. Students will develop an understanding of each experiment by reading original research articles, discussing the articles in terms of the ideas that they introduce to predict results, and examining how those predictions relate to our own results. Students will have hands-on experience with data collection, data entry in Excel, data analysis and using SPSS, and guided instruction on writing each section of the APA style report for the actual experiments that we run in class. For the second part of the course, students (either alone or in pairs) will be responsible for researching a topic of their choice, designing and proposing their own cognitive experiment, collecting data, analyzing data, writing a full APA style manuscript, constructing a poster and presenting their results in an end-of-semester poster fair.

This class is designed to be of interest to students who are considering graduate school in experimental psychology, but it will be useful to any student who enjoys the topics of human learning, memory and problem solving, and wants to better understand the nature of cognitive research. More generally, a background in cognitive experimentation is good experience for students who are considering a wide range of careers in areas including business, education, law, medicine, and neuroscience. This course requires students to keep up with assignments during the fast-paced first

half of the course, and to be highly self-motivated as they propose, execute, and complete their projects during the second half of the semester.

**Journal Articles:**

Readings will be original journal articles that will be assigned once students have participated in each experiment.

**Strongly Recommended Text: APA Publication Manual (6th edition; 2009).**

All of your assignments MUST conform to APA style and students will be assigned readings from the publication manual. The publication manual is recommended for purchase. If you are considering pursuing a graduate degree in psychology or a field that uses APA style, you might as well buy it now. For others, this book is on reserve at the library. Making copies of important sections will help you check your style.

**Grading**

Grades will be determined by the following:

- 30% Participation in in-class experiments and laboratory activities
- 20% Quizzes on readings
- 30% Written Assignments
- 20% Final Project

**No make-up quizzes will be given.**

**No late papers will be accepted.**

**The University recognizes a student's responsibility for attending classes as constant.**

**In case of emergencies, contact the instructor as soon as possible.**

**This is a fast-paced laboratory course with many in-class exercises and time-dependent assignments. Students will not be able to earn credit for missed activities due to late registration or absences. Students joining the course after the end of the second week of classes will have already missed the opportunity to earn a large percentage of available points.**

**Students with Disabilities:** Reasonable accommodations for students with disabilities will be made to the extent that it is possible, but requests must be made **before or during the first week of class**. Students with disabilities who require accommodations for access and participation in this course must be registered with the Office of Disability Services (ODS). Please contact ODS at 312/413-2103 or 312/413-0123.

**Campus Policy on Observance of Religious Holidays:** Students who wish to observe their religious holidays shall notify the faculty member **by the tenth day of the semester** of the date when they will be absent unless the religious holiday is observed on or before the tenth day of the semester. In such cases, the student shall notify the faculty member at least five days in advance of the date when he/she will be absent. The faculty member shall make every reasonable effort to honor the request, not penalize the student for missing the class, and if an examination or project is due during the absence, give the student an exam or assignment equivalent to the one completed by those students in attendance. If the student feels aggrieved, he/she may request remedy through the campus grievance procedure.

**Plagiarism/Cheating:** Plagiarism is defined as the use (or submission) of the ideas, thoughts, or writing of another person, without proper acknowledgment (quotation marks and citations). If you are ever unsure about what constitutes plagiarism, attend the TAs office hours. Bring examples of your writing and the original article, and ask the TA for guidance. When you are composing a new

research paper and discussing other research papers in it, be sure to use your own words to describe the gist of other studies or explanations provided in original papers. Make sure that you discuss original papers in a way that supports the point you are making in your own paper. This is one good way to avoid using someone else's words. If you must use a direct quote or wording from a paper you are reading, then you should use quotation marks. It is rare that you should have to do this in writing research papers, except for when you are reporting exact instructions that were used in previous experiments in a method section. In almost all other cases, you should be paraphrasing or summarizing main points from other articles. When you paraphrase or summarize another paper do not use quotation marks, but do cite the source using APA style.

You may discuss our readings, experiments and findings with other students in the course. But, be sure to write your own assignments. **Do not copy another student's assignments or existing papers. This is plagiarism. Do not share your writing assignments with other students. You will also be considered at fault even if another student uses your work without your knowledge. Do not give others to opportunity to copy your work.**

Any form of plagiarism (misrepresentation of another's work or answers as your own) will not be tolerated. Students who are found to have plagiarized work or to have copied on any assignment will be subject to various disciplinary actions including a failing grade on the particular assignment, failure of the entire course, and possible expulsion from the University. For more information about the violation of Academic Integrity and its consequences please see the UIC Department of Student Judicial Affairs (<http://www.uic.edu/depts/sja/integrit.htm>).

### Course schedule

Jan 9           Introductory remarks/Notecards, Review of Syllabus, Overview of Class  
                   Discussion of Five Key Questions (these are the questions that will appear on all quizzes to test your understanding of each experiment we read):

1. What is the main theoretical question about cognition that is being tested in this study?
2. What was the manipulation or what defines the groups of participants? (IV (operational definition))
3. What was measured? What task did participants do? (DV) (operational definition)
4. What happened (how did the IV affect the DV)?
5. What does this empirical result mean? How does this result relate to the main theoretical question about cognition?

Participate in Experiment 1

### [Reading Assignment 1: Seegmiller, Watson & Strayer, 2011](#)

Jan 11           Quiz on Reading Assignment 1

                  How to read a journal article BRING A HARD COPY OF THE ARTICLE TO CLASS WITH YOU

                  Walk through article together

                  Discuss Stimuli and Method

                  Make predictions for Experiment 1

Overview of APA Style: [Example APA Style Paper](#)  
[Manuscript Order and General APA Style](#)

Specifics of APA Style for [Title Page/Abstract](#)

Jan 16 No Class MLKJRDAY

Jan 18 APA Style (Continued)

Examples [Method and References](#)

Lecture on [APA Style for Method](#) [APA Style for Citations and References](#)

Example [Method](#) and [Detailed Specifications from APA Manual](#)

APA Style for [different kinds of references](#) (articles, books, etc.) ([APA 7.11 includings youtube](#))

Create APA Style template in Word

Complete [APA Style Checklist](#)

Writing Assignment 1: Title Page, Abstract, Methods, References for Experiment 1  
[Grading Checklist for Writing Assignment 1](#) (Title Page Abstract Methods References)

Jan 23 Score data from Experiment 1

Chi-Square Discussion and Worksheet

Intro to SPSS, Descriptive and Inferential Statistics, [SPSS Worksheet](#)

Discuss findings

Jan 25 Writing Assignment 1 Due (through Blackboard BEFORE CLASS and bring hard copy to class)

APA Style Discussion

Participate in Experiment 2

Reading Assignment 2: [Alter et al. \(2007\)](#)

The quiz will be based on Experiment 1. We also did Experiment 4. The Sushi task was based on [Song & Schwarz \(2008\)](#).

Jan 30 Quiz on Reading Assignment 2

Walk through article, background, and predictions for study BRING A HARD COPY OF THE ARTICLE TO CLASS WITH YOU

Discuss Exact Running Procedure

Develop Running Script

Data Collection Assignment: Collect data in Experiment 2 from friends/relatives before next class using running script

Feb 1 BRING NEW DATA TO CLASS

Discussion on inter-rater reliability and refresher on t-tests

Score data, Develop Rubric

Compute Interrater Reliability using ICC [Worksheet](#)

Finalize and enter data in Excel/SPSS, [Worksheet](#)  
Analyze and discuss findings

Feb 6 Lecture on [APA Style for Results](#)  
Example [Results](#)  
APA Standard Abbreviations: [Measurement, Statistical](#)

[Example Coding Section 1](#)  
[Example Coding Section 2](#)

Writing Assignment 2 -- Title, Abstract, Results, References, and Table

Write a result section including a coding overview, and reporting the results for each of the three DVs that we collected (CRT, Syllogisms and Recipe Reading/Recall)

[Grading Checklist for Writing Assignment 2](#) (Title Page, Abstract, Results, References, and Table)

Feb 8 APA Style for Tables  
  
How to make APA style tables in Word, [Worksheet](#)  
Example [Table 1](#)  
  
Computing Effect Sizes, [Worksheet](#)

Feb 13 Writing Assignment 2 Due (through Blackboard BEFORE CLASS and bring hard copy to class)  
APA Style Discussion  
[General APA Style and Common APA Errors](#)  
Participate in Experiment 3

Reading Assignment 3: [Hall 1997](#)

Feb 15 Quiz on Reading Assignment 3  
Walk through article, background, predictions BRING A HARD COPY OF THE ARTICLE TO CLASS WITH YOU  
[How to write introductions to articles](#)  
[How to find articles for your introduction](#)

Article Assignment: Find an article relevant for writing an introduction to Experiment 3 and submit APA style refs and pdf of article to Dr. Wiley.

Feb 20 Article Presentations: Summarize a relevant article for the class  
(5 minutes per student, may use ONE OR TWO PPT SLIDES showing JUST stimuli or results, NO TEXT, must send slide in advance)

Feb 22 Finish Presentations (if needed)  
Analyze data using [worksheet](#)  
Discuss results

Writing Assignment 3: title, abstract, intro and reference section for Experiment 3

(You must cite 3 journal articles in the introductory section)

[Grading checklist for Writing Assignment 3](#) (Title Page, Abstract, Introduction, References)

Feb 27 Writing Assignment 3 Due (through Blackboard and bring hard copy)  
[How to pick a project](#)  
[How to write a proposal](#)  
 Do literature search, decide on topic, find main reference article (EMAIL PROJECT IDEAS TO DR. WILEY BY MARCH 3)

Project Assignment: Send one PROJECT EMAIL per project by email to instructor and she will schedule meeting (during normal class times in her office next week).

TO STAY ON TRACK SEND EMAIL BY MARCH 3.

Mar 1 NO CLASS MEETING. (All students/teams working independently on project ideas.)

Mar 6-8 NO CLASS MEETING. Scheduled individual/team meetings with Dr. Wiley to discuss approve project topics in 1054C BSB.

Mar 13-15 NO CLASS MEETING. Scheduled individual/team meetings with Chelsea and Tim to finalize projects (in 2068 BSB).

Following meeting with Instructor, finish literature review to select two other articles for your introduction. (Each person finds their own.)

Develop script/exact running procedure and exact stimuli.

Pilot project on at least 2 people (each) to test stimuli, script, data collection, data coding.

When you are happy with your materials, email Chelsea to schedule a meeting with her and Tim.

Bring exact stimuli and script (all materials) to scheduled meeting slot (during normal class time in 2068).

Chelsea and Tim will help to proof and finalize Experiment Materials and Running Procedure (so they can administer your experiment)

Following meeting, finalize proposal. (if working in teams, teach member writes their own proposal. Team members can only have 1 reference in common).

Mar 17 Full written proposal due by Friday Mar 17  
 Proposal should be submitted through Blackboard.  
 FINAL and EXACT COPIES of all running materials should be submitted to Chelsea by email.

[Proposal Grading Sheet](#)

Mar 20-24 Spring Vacation

Mar 27-29 RESUME MEETING IN CLASSROOM.  
 Participate in Data Collection for our own projects

April 3-5 (Possible Data Collection for other lab)  
 Start data entry, coding and analysis

Use worksheets from prior labs to explore and analyze your data, and to create APA style Tables.

Discussion on Figures and Appendices in APA Style Manuscripts (Theoretical Models, Stimuli, Procedure, Results)

APA Style for Figures  
 How to make Graphs in Excel, [Worksheet](#)  
 Example [Figure](#)

[How to construct and present your poster](#)

Poster Templates at Makesigns.com

[http://www.makesigns.com/SciPosters\\_Templates.aspx](http://www.makesigns.com/SciPosters_Templates.aspx)

Discussion [how to revise](#) into Final Reports (Full APA Style Papers)  
 Gradesheet for New Sections of Final Paper  
 Complete APA Checklist

April 10-12 (Possible Data Collection for other lab)  
 Lab open for data entry, coding, analysis, manuscript writing, poster preparation

April 17-19 ANALYSIS ASSIGNMENT: Get approval on your analyses, draft of results section, results figure.  
 Lab open for data entry, coding, analysis, manuscript writing, poster preparation

April 24 Poster draft due  
 Advice Day  
 Applying to Grad School; [Letters of Recommendation](#); [Sample Vita](#)  
 Feedback on poster drafts

April 26 Final day to work on posters and APA style papers.

FINALS WEEK POSTER FAIR

FINAL PAPERS DUE THROUGH BLACKBOARD DURING FINALS WEEK.

last updated 2.20.17