Psychology 353: Laboratory in Cognition and Memory
Fall 2016: CRN 26629 and CRN 28566
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
Office Hours: Wed 2-3 or by appointment (it is always best to drop me an email in advance)

TA: Tim George
Office: 1029 BSB Email: tgeorg7@uic.edu
Office Hours: Tues 2-3 or by appointment

Special Bonus TA: David Sarmento

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 in 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, constructing a poster and presenting their results in an end-of-semester poster fair, and writing a full APA style manuscript about their study.
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 education, law, business, 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 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. They will available through UICCAT online journal subscriptions.

**Strongly Recommended Text:** APA Publication Manual (6th edition; 2009).
All of your assignments MUST conform to APA style. This publication manual is recommended but not required 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 and you may wish to make copies of important pages to help you keep to 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 another's ideas, thoughts, or writing, 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 other authors' explanations. Make sure that you discuss other 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 when describing what was found in a previous study or suggested by a previous author, 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. 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 cheat off of your work.**

Any form of plagiarism or cheating (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 cheated 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**

| Aug 22 | Introductory remarks, 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 that is being tested in this study? |
|        | 2. What was the manipulation or what defines the groups of participants? (IV) |
|        | 3. What was measured? What task did participants do? (DV) |
|        | 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? |
|        | Participate in Experiment 1 |
Reading Assignment 1:  Harp & Mayer (1997)

Aug 24   Quiz on Reading Assignment 1 (Experiment 1 from the paper)
         Introductions/Notecards
         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: Manuscript Order Example APA Style Paper
         Lecture on APA Style for Method
         Example Method and Detailed Specifications from APA Manual
         Complete APA Style Checklist

Aug 29   Score data from Experiment 1
         Intro to SPSS, Descriptive and Inferential Statistics, Worksheet
         Analyze and Discuss findings

         APA Style (Continued) Abstract, Title Page, Methods, References
         Lecture on APA Style for Title Page/Abstract APA Style for References
         Examples Method and References Title Page/Abstract
         More General APA Style points

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

Aug 31   Writing Assignment 1 Due (through Blackboard BEFORE CLASS and bring
         hard copy to class)
         APA Style Discussion
         Participate in Experiment 2

Reading Assignment 2: To be announced after participation in the study

Sep 5    NO CLASS, LABOR DAY

Sep 7    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

Data Collection Assignment: Collect data in Experiment 2 from friends/relatives before next
class
Sep 12
Scoring Results
BRING NEW DATA TO CLASS
Score and enter data in Excel/SPSS, Worksheet
Lecture on APA Style for Results
Example Results
Analyze findings (if time)

Sep 14
Analyze and discuss findings
How to make Tables, Worksheet
Example Table 1
APA Standard Abbreviations: Measurement, Statistical

Sep 19
How to make Figures and Graphs in Excel, Worksheet
Example Figure
Recap: General APA Style and Results sections
Writing Assignment 2 -- Title, Abstract, Results, References, Table AND Figure
Grading Checklist for Writing Assignment 2 (Title Page, Abstract, Results, References, Table and Figure)

Sep 21
Writing Assignment 2 Due (through Blackboard BEFORE CLASS and bring hard copy)
APA Style Discussion
Participate in Experiment 3

Sep 26
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

Reading Assignment 3: To be announced after participation in the study
Data Coding Assignment: Code data using rubric and fill in excel sheet before next class
Article Assignment: Find an article relevant for writing an introduction to Experiment 3 and submit APA style refs and pdf of article to TA

Sep 28
Interrater Reliability Discussion
Compute Interrater Reliability using ICC
Finalize Data
Analyze data using worksheet
Discuss results
Oct 3       Article Presentations: Summarize a relevant article for the class  
(5 minutes per student, may use one a SINGLE PPT SLIDE, must send slide in advance)

Oct 5       Article Presentations: Summarize a relevant article for the class  
(5 minutes per student, may use one a SINGLE PPT SLIDE, must send slide in advance)

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)

Oct 10      Writing Assignment 3 Due (through Blackboard and bring hard copy)
**How to pick a project**
**How to write a proposal**

Project Assignment: Decide on a topic/IV/DV for your project (you can either work alone or with a partner)
Complete one worksheet per project
When worksheet complete email answers to instructor and she will schedule meeting (during normal class times in her office)

Oct 12-17   Meetings with Instructor to discuss approve projects.
Following meeting, develop script/exact running procedure and exact stimuli.
Classroom will be available to work on Proposals/Worksheets

Oct 19-26   After meeting with instructor, develop and pilot project on at least 2 people (each) to test stimuli, script, data collection, data coding
When you are happy with your materials, email TA to schedule a meeting.
Bring exact stimuli and script (all materials) to TA meetings (during normal class time in TA office).
Meet with TA to proof and finalize Experiment Materials and Running Procedure (so TA can administer your experiment)
Following meeting, finalize proposal. (if working in teams, team members can only have 1 reference in common).

Oct 28      Full written proposal due to TA by Friday Oct 28
Proposal should be submitted through Blackboard.
FINAL and EXACT COPIES of all running materials should be submitted to TA.
**Proposal Grading Sheet**

Oct 31, Nov 2  Participate in Data Collection

Nov 7       Proposals and Data Returned
How to construct and present your poster
Poster Templates at Makesigns.com

Discussion how to revise into Final Reports (Full APA Style Papers)
Gradesheet for New Sections of Final Paper

Use this complete APA Checklist to check your APA style.

Nov 9
Lab open for data entry, coding and analysis
Use worksheets from prior labs to explore and analyze your data, and to create APA style Tables and Figures.

Nov 14
Lab open for data entry, coding, analysis
Get approval from TA that you have done your analyses correctly either during class on Monday or during office hours on Tuesday.

Nov 16
Possible Data Collection Date for Social Lab
Lab open for poster/MS preparation. Poster boards available.

Nov 21
Possible Data Collection Date for Social Lab
Lab open for poster/MS preparation; consulting. Poster boards available.

Nov 23
No Class. Poster drafts due by email.

Nov 28
Advice Day
Applying to Grad School; Letters of Recommendation; Sample Vita
Feedback on posters.

Nov 30
Final day to work on posters and APA style papers.

POSTER FAIR DURING FINALS WEEK.
FINAL PAPERS DUE THROUGH BLACKBOARD DURING FINALS WEEK.

last updated 8.24.16