

PSYC 3145-001  
Cognitive Processes Laboratory  
Fall 2008  
W 1:00 – 3:50 PM 428 LS

Instructor: Yasushi Kyutoku (Q)

Office Hours: W 12-1 pm, after the classes, or by appointment  
Office: LS 540  
Email: [kyutoku@uta.edu](mailto:kyutoku@uta.edu) **Email is the best way to reach me**

### **COURSE DESCRIPTION**

This course provides you with experience discussing and answering questions concerning a variety of methods and procedures commonly used in conducting research in cognitive psychology, analyzing the data collected in such research, and communicating the results of the project to the scientific community. In order to take this course you must have already taken and passed PSYC 2444, and you must either have already taken and passed PSYC 4334 or be enrolled in it this semester.

Almost every week you will participate in an experiment. Each week, you will write a summary and take a quiz on the reading assignments. Towards the end of the semester you will design, set up, and conduct your own experiment, and for one or two weeks all of you will be participating in each other's experiments. The class will end with all students presenting to others the results of the experiments they designed.

### **COURSE OBJECTIVES**

The objectives of the course are for you to be able to perform and complete the tasks stated in the course description.

### **WEEKLY READINGS**

Each week a student will be randomly selected to present the assigned readings from the previous lab to the class and help lead the class in a detailed discussion of that reading. It is the responsibility of every student to be prepared every lab for this assignment!

### **ATTENDANCE**

PUNCTUAL ATTENDANCE IN LAB IS MANDATORY! For each absence and for each tardiness by more than 10 minutes, ten points will be deducted from your lab grade.

### **CELL PHONE POLICY**

All cell phones must remain OFF during lab time. No talking on the phone or text messaging is to occur during the time allotted for this lab.

### **TENTATIVE GRADING/ASSIGNMENTS**

1 page Summary/ Exp summary	5 points each x approximately 9	= 45 points
Quiz	5 points each x approximately 9	= 45 points
Leading discussion		20 points
Paper 1 (Stroop effect)		40 points
Original Experiment & Final Paper		100 points
Presentation		<u>50 points</u>
<b>Total</b>		<b>300 points</b>

## Quizzes

The quizzes will be given on the weeks outlined below following an assigned reading. These will test knowledge regarding 1) how to interpret experimental results as they relate to the original findings 2) experimental design issues, and 3) theoretical concepts relevant to the current experiment, as well as related ones covered in the assigned reading.

## Paper 1 and final paper

During the semester, you will write two papers on experiments. You should clearly explain the theory behind the experiment, related experiments and theories, competing theories, methods, results, and discussion **within 5 pages for paper 1 and within 10 pages for the final paper**. These papers must be **your own personal and individual** work.

## Original Experiment

By the end of the semester, you will also design, run, and write up your own experiment. Be sure to start thinking early about ideas that interest you. For the experiment, you will work with your teammate(s) as a group, but you are going to turn in an **individually** written paper; in other words, this original paper will show your own personal work, not that of your team or information from internet. The papers **must be** in APA format. Late papers will not be accepted.

## Poster Presentation

Each team presents their experiment. Make sure you present your experiment clearly including: Introduction (background), Design, Method, Data Analysis (Results), Interpretation and Future Direction. You need to prepare to answer the questions from our class and the instructor. It is imperative that each person be capable of making the entire presentation. It is each person's responsibility to be fluent with the details of their project.

## TENTATIVE LAB SCHEDULE

### Week 1

**8/27**                      **Topics:** Introduction to CogLab  
How to discuss paper

#### Assigned Reading for the Week 2 (How to read APA articles):

1. Roediger, H. L., & Gallo, D. A. (2004). How to read a journal article in cognitive psychology. In D.A. Balota & E. J. Marsh (Eds.), *Cognitive Psychology: Key Readings*. (pp. 723-734). New York, NY: Psychology Press.

### Week 2

**9/3**                      **Due:** 1 page Summary due for the article 1  
**Tasks:** Quiz 1 on article 1  
Article Presentation & Discussion over assigned readings  
**Topics:** Introduction to E-Prime  
Start Designing Stroop Experiment as a pair (E-prime)  
Experiment summary sheet

#### Assigned Reading for Week 3 (Effects of alcohol on attention):

2. Clifasefi, S. L., Takarangi, M. K. T., & Bergman, J. S. (2006). Blind drunk: The effects of alcohol on inattentive blindness. *Applied Cognitive Psychology, 20*, 697-704.

#### Assigned Reading for Week 3 (Weapon Focus Effect):

3. Pickel, K. L., Ross, S. J., & Truelove, R. S. (2006). Do weapons automatically capture attention? *Applied Cognitive Psychology, 20*, 871-893.

### **Week 3**

**9/10**

**Due:** Experiment summary sheet due for the article 2 & 3

**Tasks:** Quiz 2 & 3

Article Presentation & Discussion over assigned readings

Finish designing Stroop experiment (cont'd)

Run and analyze your Stroop experiment (get participants from other groups)

**Topics:** Statistical Analysis Refresher (*t*-test and ANOVA)

SPSS review

#### Assigned Reading for Week 4 (Misinformation Effect):

4. Loftus, E. F. & Palmer, J. C. (1974). Reconstruction of automobile destruction: An example of the interaction between language and memory. *Journal of Verbal Learning & Verbal Behavior*, 13, 585-589.

#### Assigned Reading for Week 4 (Levels of Processing):

5. Craik, F. I. M. & Tulving, E. (1975). Depth of processing and the retention of words in episodic memory. *Journal of Experimental Psychology: General*, 104, 268-294.

### **Week 4**

**9/17**

**Due:** Experiment summary sheet due for the article 4  
1 page summary due for the article 5

**Tasks:** Quiz 4 & 5

Article Presentation & Discussion

Write up Stroop paper

**Topics:** Title Page, Introduction, & citations

Method & Results sections

Tables & Figures

Discussion section

Importance of IRB

Literature Review Refresher (psycINFO, Find articles)

#### Assigned Reading for Week 5 (Serial Position Effect):

6. Bjork, R. A., & Witten, W. B. (1974). Recency-sensitive Retrieval Process in Long-Term Free Recall. *Cognitive Psychology*, 6, 173-189.

### **Week 5**

**9/24**

**Due:** Stroop Effect Write-up due (Stroop effect)  
Experiment summary sheet due for the article 6

**Tasks:** Quiz 6

Article Presentation & Discussion

Experimental Design Development

#### Assigned Reading for Week 6 (False memory):

7. Clark, S.E., & Loftus, E.F. (1996). The construction of space alien abduction memories. *Psychological Inquiry*, 7, 140-143.

### **Week 6**

**10/1**

**Due:** 1 page summary due for the article 7  
Quiz 7

**Tasks:** Article Presentation & Discussion

Meet with Instructor about experiment

Make Adjustments to Proposed Methods section

**Topics:** Picture Superiority effect Demo

Assigned Reading for Week 7 (Reverse Pictorial Superiority Effect):

8. Weldon, M. S., & Roediger, H. L. (1987). Altering retrieval demands reverses the picture superiority effect. *Memory and Cognition*, 15, 269-280.

**Week 7**

10/8

**Due:** Proposed Methods Due  
Experiment summary sheet due for the article 8

**Tasks:** Quiz 8  
Article Presentation & Discussion  
Make Adjustments to Proposed Methods section (modify your experiment)

**Topics:** Lexical Decision Demo

Assigned Reading for Week 9 (Decision making):

9. Tversky, A., & Kahneman (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185, 1124-1131.

**Week 8**

10/15

**Due:** Experiment summary sheet due for the article 9

**Tasks:** Quiz 9  
Article Presentation & Discussion  
Work on Stimuli for final project

**Week 9**

10/22

**Due:** Stimuli/Programs for group experiment Due

**Tasks:** Fix any problems found with your experiment

**Week 10**

10/29

**Tasks:** Run your experiment, collecting data

**Week 11**

11/5

**Tasks:** Run your experiment, collecting data (if necessary)  
Analysis & Write-up  
Preparation for the poster presentation

**Week 12**

11/12

**Due:** Rough Draft Due (If you want me to go over your paper.)  
Poster Draft Due

**Tasks:** Preparation for the presentation  
Work on your final draft

**Week 13**

11/19

**No class:** Thanks giving

**Week 14**

11/26

**Due:** Poster (final format) Due

**Tasks:** Prepare for poster presentation  
Individual feedback for the rough draft  
Work on your final draft

**Week 15**

## 12/5 (3-5 pm) Poster Presentation, FINAL DRAFT DUE

### OTHER INFORMATION

Major assignments must be typewritten **and follow APA format.**

Effective communication of scientific work is not always easy and takes long practice to master.

Make sure to ask questions of the lab instructor as you are working on your papers.

The computers in room314 are available for your use outside of class, (except when other classes are using them). Please check the schedule posted on the door for class schedules.

**Americans with Disabilities Act (ADA):** If you are a student who requires accommodations in compliance with the ADA, please consult with me at the beginning of the semester. As a faculty member, I am required by law to provide reasonable accommodation to students with disabilities, so as not to discriminate on the basis of that disability. Your responsibility is to inform me of documentation authorizing the specific accommodation. Student services at UTA include the Office for Students with Disabilities (located in the lower level of the University Center) which is responsible for verifying and implementing accommodations to ensure equal opportunity in all programs and activities.

**Student Support Services:** The University supports a variety of student success programs to help you connect with the University and achieve academic success. They include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817-272-6107 for more information and appropriate referrals.

**Academic Honesty:** Academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form at The University of Texas at Arlington. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. (Regents:Rules and Regulations, Part One, Chapter VI, Section 3, Subsection 3.2., Subdivision 3.22).

**Bomb Threats:** If anyone is tempted to call in a bomb threat, be aware that UTA will attempt to trace the phone call and prosecute all responsible parties. Every effort will be made to avoid cancellation of presentations/tests caused by the bomb threat. Unannounced alternate sites will be available for these classes. Your instructor will make you aware of alternate class sites in the event that your classroom is not available.