

PSYC 3145-001
Cognitive Processes Laboratory
Summer 11 wk 2008
Life Sciences Room 428
M,W 6:00 - 7:50 PM

Instructor: Tony Coker

Office Hours: W 5-6 pm, after the classes, or by appointment
Office: LS 538
Email: coker@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 take a quiz on the previous week's activities. 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.

WEEKLY READINGS

Each week a student will be randomly selected to present the assigned readings from the previous week 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 week 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.

COURSE OBJECTIVES

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

GRADING/ASSIGNMENTS

Lab Quizzes 5 points each
Summary Sheets 5 point each
Leading discussion 20 points
Paper 1 (Stroop effect) 30 points
Paper 2 (Schema Abstraction) 30 points
Original Experiment & Paper 100 points
Presentation 50 points

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 Paper 2:

During the 11wk summer session, you will write two papers on experiments (Stroop effect and Schema Abstraction). You should clearly explain the theory behind the experiment, related experiments and theories, competing theories, methods, results, and discussion **within 5 pages**. 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

5/28 Introduction
How to discuss paper
Introduction to E-Prime

Assigned Reading (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.
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.

Week 2

6/2 Quiz 1 and 2 (on Assigned readings)
Article Presentation & Discussion over assigned readings
Begin Stroop Design

6/4 Design and Run Stroop experiment
Begin Analysis

Assigned Reading (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.
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.

Week 3

6/9 Quiz 3 and 4 (on Assigned readings)
Article Presentation & Discussion over assigned readings
Analyze Stroop Data

6/11 Analyze Stroop data

Begin Write-up
Experimental Design Development

Assigned Reading (Levels of Processing):

5. Craik, F. I. M. (2002). Levels of processing: Past, present...and future? *Memory*, 10, 305-318
6. Bransford, J. D., & Franks, J. J. (1971). The abstraction of linguistic ideas. *Cognitive Psychology*, 2, 331-350.

Week 4

- 6/16** Quiz 5 and 6 (On Assigned Readings)
Article Presentation & Discussion
Continue Writing Stroop Paper
- 6/18** Design and Run Bransford and Franks (1971) Experiment
Stroop Effect Write-up due (Stroop effect)
Continue Experimental Design with partner

Assigned Reading (False memory):

7. Clark, S.E., & Loftus, E.F. (1996). The construction of space alien abduction memories. *Psychological Inquiry*, 7, 140-143.
8. Weldon, M. S., & Roediger, H. L. (1987). Altering retrieval demands reverses the picture superiority effect. *Memory and Cognition*, 15, 269-280.

Week 5

- 6/23** Quiz 7 & 8 (on Assigned Readings)
Article Presentation & Discussion
Analyze & Write-up Schema Abstraction Experiment
Proposed Methods Due
- 6/25** Meet with Instructor about experiment
Make Adjustments to Proposed Methods section (modify your experiment)

Assigned Reading (Reverse Pictorial Superiority Effect):

9. Meyer, D.E., & Schvaneveldt, R.W. (1971). Facilitation in recognizing pairs of words: Evidence of a dependence between retrieval operations. *Journal of Experimental Psychology*, 90, 227-234.
10. Tversky, A., & Kahneman (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185, 1124-1131.

Week 6

- 6/30** Quiz 9 & 10 (on Assigned Readings)
Article Presentation & Discussion
Make Adjustments to Proposed Methods section
- 7/2** Work on Stimuli for final project
Schema Abstraction Write-up due (paper 2)

Week 7

- 7/7** Begin programming experiment
- 7/9** **Stimuli/Programs for group experiment Due**
Fix any problems found with your experiment
- 7/11** **Last day to drop courses-Summer II 11wk session**

Week 8

7/14 Run your experiment, collecting data

7/16 Run your experiment, collecting data (if necessary)
Analysis & Write-up
Preparation for the presentation

Week 9

7/21 Preparation for the presentation
Rough Draft Due

7/23 **Poster Due**

Week 10

7/28 Work on your final draft
Prepare for poster presentation

7/30 Work on your final draft
Prepare for poster presentation

Week 11

8/6 **Poster Presentation, FINAL PAPER 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.

Grading Rubric: Cog Lab Summer 2008

Paper 1: Stroop Paradigm

Portion	Points
Introduction	8
-Theory	3
-Content	3
-APA style	2
Method	6
-Clarity	3
-APA style	3
Results	6
-Stats Understanding	2
-APA style	2
-Figures	2
Discussion	8
-Theory	4
-Content	4
Reference	2
-APA style	2
Total	30

Paper 2: Schema Abstraction Paper

Portion	Points
Introduction	8
-Theory	3
-Content	3
-APA style	2
Method	6
-Clarity	3
-APA style	3
Results	6
-Stats Understanding	2
-APA style	2
-Figures	2
Discussion	8
-Theory	4
-Content	4
Reference	2
-APA style	2
Total	30

Poster Presentation: Original group project

Portion	Points
Poster	35
-Style/Content	15
-Understanding	20
Presentation	15
-Communication	15
Total	50

Final Paper: Individual Write-up of original project

Portion	Points
Introduction	30
-Theory	12
-Content	12
-APA style	6
Method	20
-Clarity	10
-APA style	10
Results	15
-Stats Understanding	6
-APA style	6
-Figures	3
Discussion	30
-Theory	15
-Content	15
Reference	5
-APA style	5
Total	100