

## Psychology 353: Laboratory in Cognition and Memory

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### Texts and Materials:

1. PschMate software and workbook (with CD and activation code)
2. APA Publication manual
3. Additional readings will be made available as needed

**Prerequisites:** To enroll in this course you MUST have taken PSCH 242 (Introduction to Research) and PSCH 342 (Statistics). You also must have taken PSCH 352 (Cognitive Psychology) or be concurrently enrolled in PSCH 352.

**Course Description:** The goal of this course is to introduce you to empirical research techniques in cognitive psychology. To do this, you will participate in several experiments, both as a subject and as an experimenter. We will initially perform these experiments in class as a group. Later in the course you will run an experiment of your own, which you will write up in a formal report and present at a class mini-convention. Each experiment that we perform will involve some or all of the following parts: (1) Introduction to the topic; (2) Development of hypotheses, research design, and methodology; (3) Collection and analysis of data; (4) Presentation of results; (5) Discussion and interpretation of results in light of the hypotheses and other research; and (6) Conclusions, including implications for future research.

**Written Reports:** An important element of research is communicating your results to other people. You will produce some form of written report for several experiments. Some of these will be partial reports (e.g., results section only) and one will be a full report (i.e., all the sections included in a journal article). Reports will include references, figures, graphs, and tables, when appropriate. All reports must be typed using APA style. Although collecting and analyzing data will be a group effort, writing reports will be an individual effort. **YOU ARE TO WRITE YOUR REPORTS ON YOUR OWN AND IN YOUR OWN WORDS.**

**Grading:** Grades will be based on class participation, written reports, assignments, and your final project. Active participation in class discussions and attendance is EXPECTED and REQUIRED. There will be no final examination; the final project serves this purpose. Note that the components of the final project will be worth roughly half of your grade. A traditional points breakdown will be used to determine your grade (90 +% = A, 80-89% = B, 70-79% = C, 60-69% = D, less than 60% = F)

Assignments will include: (Subject to change!)

1. Small assignments (e.g., summarize and analyze data, answer questions about experiments)
2. Written report #1 (full report: title, abstract, introduction, methods, results, discussion, references, table, figure)
3. Final project proposal (partial report: title, introduction, methods, references)
4. Final project report (full report)
5. Final project presentations (joint poster presentation for each project group plus individual oral presentations)
6. Class participation (e.g., preparing for class, participating in discussions)

**Expected Points Breakdown: (Subject to change!)**

Look at the **Grading Guide** posted on Blackboard for details about how reports are graded.

Assignment	Points	Approximate %
10 Small assignments (10 points each)	100	19
Written report #1	100	19
Final project proposal	50	9.5
Final project report	200	38
Final project class presentations	30	5.7
Class participation	45	8.6
TOTAL	525	

**Other Information.**

1. **Participation counts substantially towards your grade.** This includes participating in discussions, preparing for class, attending class, and **arriving on time**.
2. **Plagiarism will not be tolerated.** If any amount of plagiarism is discovered in an assignment, you will receive a grade of 0 (zero) for the assignment and possibly a failing grade for the course. I will also notify the Office of the Dean of Student Affairs and file an academic dishonesty charge that will be added to your academic file. You will work in groups on some parts of your assignments, but you must write the final version of all assignments on your own and in your own words. Copying from your partners is a form of plagiarism.
3. **Late Assignments and Make-ups.** Late assignments will be penalized 5% or 1% per day late (including weekend days), whichever is greater. Make-ups generally cannot be given because of the format of the class, so hand in your assignments on time.

**Course Outline (Assignments are available on Blackboard)**

Date	Topic
Aug	25 Introduction. What is research? What is an experiment?
	27 Review Experimental Terms. Perform Comprehension experiment (Letter detection vs. Normal reading). <b>Read Linton &amp; Gallo chapters 2 and 3 .</b> <b>Assignment 1 due: Experimental terms questionnaire .</b>
Sep	1 Data tabulation and analysis for Comprehension experiment. <b>Assignment 2 due: Discussion questions for Comprehension experiment.</b>
	3 Write results section for Comprehension experiment & perform additional analyses.
	8 Discuss experimental design and interactions. <b>Assignment 5 due: Questions for Linton &amp; Gallo Chapter 3 .</b>
	10 Orientation to Psychmate. Practice generating variations of experimental designs. <b>Assignment 3 due: Excel data file.</b>
	15 Discuss APA style and writing experimental reports . <b>Read APA manual chapters 1, 2, and 5.</b> <b>Assignment 4 due: APA style questions.</b>
	17 Perform Sternberg STM scanning experiment (Psychmate #2.2). Introduction and data collection. <b>Read Sternberg article.</b>
	22 STM Scanning: Data tabulation, analysis, and discussion of results . <b>Assignment 6 due: Discussion questions for Sternberg STM scanning experiment.</b>
	24 Discuss final projects proposals. Introduction to PEAK.
	29 Perform third in-class experiment (topic to be determined). Introduction, data collection, data tabulation. <b>Assignment 7 due: Analyze Sternberg data using SPSS.</b>
Oct	1 Individual help with Report #1. <b>Assignment 8 due: Discussion Questions for third in -class experiment.</b>
	6 Data analysis and discussion of results for third in -class experiment. <b>Report #1 Rough Draft Due</b> (30 points of total, must be a complete draft).
	8 Perform fourth in-class experiment (topic to be determined). Introduction, data collection, data tabulation.
	13 Data analysis and discussion of results for fourth in-class experiment. <b>Assignment 9 due: Discussion Questions for fourth in -class experiment.</b>

Oct	15	Determine final project groups . <b>Assignment 10 Due: Research ideas for final project.</b>
	20	Work on final project proposal and experiment . <b>Report #1 Final Draft Due.</b>
	22	Work on final project proposal and experiment .
	27	Test final project experiments.
	29	Begin running subjects & work on projects.
Nov	3	Run subjects & work on projects.
	5	<b>Final Project Proposals Due.</b> Run subjects & work on projects.
	10	Run subjects & work on projects.
	12	Run subjects & work on projects.
	17	Begin data analyses. Sample oral and poster presentation given by TA.
	19	Continue data analyses.
	24	Continue data analyses.
26	Thanksgiving Holiday!	
Dec	1	<b>Final Project oral presentations (6 minutes per group).</b>
	3	<b>Final Project poster presentations.</b>
	7	<b>Final Project reports due Monday, Dec.7 by 12:00 pm.</b>