

Psychology 1450.
Experimental Psychology: Social Cognition and Emotion
SPRING 2009

I. Who, When, Where

- Instructor: Prof. Kevin Ochsner
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office hours: By appointment
kochsner@paradox.psych.columbia.edu
- TA's: Lauren Aguilar, lja2106@columbia.edu
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Julie Spicer, jspicer@paradox.psych.columbia.edu
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- Lectures: 4:10 to 6:00 pm Monday, 614 Schermerhorn Hall
- Lab: Section 1: 6:10 to 8:00 pm Monday, Scherm. 200B
Section 2: 6:10 to 8:00 pm Tuesday, Scherm. 200B
Section 3: 4:10 to 6:00 pm Tuesday, Scherm. 200C

II. Course Overview

This course provides an introduction to the basic methods used for conducting human experimental psychological research with an emphasis on methods employed to study human social cognition and emotion. The lecture portion of the course aims to provide a conceptual foundation for understanding how to plan, conduct, analyze, and evaluate experiments, includes consideration of common problems encountered when designing studies, techniques that can be used to surmount these problems, and illustrates effective and ineffective designs with concrete examples. These examples will be drawn from primary research articles that will be discussed in lecture and are listed on the syllabus as supplemental readings.

The laboratory portion of the course provides a more practical, hands-on approach, as students apply the basic concepts covered in lecture to the conduct of experiments. Students will experience experimentation from the perspectives of experimenter and participant. The main focus of the lab is to provide a chance for students to design and carry out an experiment during the course of the semester in collaborative groups. Short written reports will be completed for all crucial stages of experiments, using a pragmatic outline format (to be discussed in the lecture and section), and students will give an oral presentation of the results of the collaborative group project. In the lab students acquire hands-on experience in designing, conducting, analyzing, interpreting, and presenting data from experimental psychological experiments.

A previous course in statistics is recommended to assist in understanding data analysis, but is not required; the basics of statistical methods necessary to understand the data analysis will be covered in this course. The emphasis in this course is on learning to think like a scientist, not be a formula jockey.

III. The reading list and weekly syllabus (subject to revision as needs arise: for most recent version see courseworks)

Required Readings:

Pelham, B. W. & Blanton, H. (2006). *Conducting research in psychology-measuring the weight of smoke*. New York: Wadsworth Press.

Course reader available at Village Copier.

Brian Scholl's notes on how to give a presentation: <http://pantheon.yale.edu/~bs265/misc/musings/bjs-presentation-notes.html>

Dan Gilbert's notes on how to give a presentation: <http://web.uvic.ca/psyc/lindsay/teaching/499/readings/gilbert.html>

Recommended Readings:

Kosslyn, S. M. (2007). *Clear and to the Point: 8 Psychological Principles for Compelling PowerPoint Presentations*. New York: Oxford University Press.

Expts Discussed in Lecture:

Experiments from the papers listed here will be discussed in lecture to illustrate various points. The primary source articles will be made available on Courseworks. You are not required to read the original sources, but you certainly would benefit from doing so.

Course Outline, Readings, and Assignments

Date	Lecture Topics	Lab Topics	Textbook and Course Reader Assignments	Expts discussed in Lecture, Available on Courseworks Site
WEEK 1 January 26	L1: Introduction, philosophy of science/course, observation, Intro to QuALMRI	Introduction, how to generate and test a theory, discussion format, ethics, on-line human subs qualification	<ul style="list-style-type: none"> Pelham Ch 1 	<ul style="list-style-type: none"> Cohen et al, '96

WEEK 2

February 2	L2: Goals of research, Question & Hypotheses, Defining your phenomena, Assumptions behind social psych research	Experiment 1 data collection, intro to lit search (Swann), HW: QuALMRI exercise	<ul style="list-style-type: none"> • Pelham Ch 2 • Greenwald et al, '98 • Dasgupta et al., '03 	<ul style="list-style-type: none"> • Zajonc '66, '69 (context) • Snyder et al, '77 (construal) • Schwarz & Clore, 83 (content) • Fazio, '01 (priming, auto) • Devine et al, '89 (auto/con)
WEEK 3				
February 9	L3: The logic of experimental design, correlations, confounds, IVs, DVs, True vs. quasi expts	Online literature searches HW: Individual Experiment Design (Handout)	<ul style="list-style-type: none"> • Pelham Ch 6 • Gilbert et al, '88 • Gilbert '03 • Fazio '01 (for lab) 	<ul style="list-style-type: none"> • Gilovich, '98 • Gilovich et al., '00 • Macrae et al., 03 • Word, Zanna & Cooper, '78
WEEK 4				
February 16	L4: Logic and Method for studies of individual differences; reliability, validity	Experiment 1 data analysis, QuALMRI feedback, Stage 1 Experiment Design HW: Stage 2 Experiment Design (PPT) AND Lab Write-Up 1	<ul style="list-style-type: none"> • Pelham Ch 3-4 • Aron et al., '92 	<ul style="list-style-type: none"> • Gross & John, '95 • Gross & John, '97 • Gross et al., '00 • Barrett et al, '01
WEEK 5				
February 23	L5: Selecting & Specifying a design, Factors & counterbalancing, Interpreting results – main effects vs. interactions	Presentations and Group Discussion	<ul style="list-style-type: none"> • Pelham Ch 8 • Ames '04 (Intxn) 	<ul style="list-style-type: none"> • Murray et al, '96 (Intxn) • Bargh et al, '96 (ME) • Chartrand & Bargh, '99 (ME, Intrxn)
WEEK 6				
March 2	L6: Review for Midterm: sample problems	Presentations and Group Discussion HW: Lab Write-up 2	<ul style="list-style-type: none"> • Leary et al, '95 • Leary '03 	<ul style="list-style-type: none"> • Newman et al., '97

WEEK 7March 8 Midterm

No Lab

WEEK 8 SPRING BREAK**WEEK 9**

March 23

L7: Capturing the real world: Psyscope Tutorial
 Opportunistic & quasi-experiments; Relation of question and method I: how theory constrains the questions you ask

- Pelham Ch 7
- Pennebaker et al, '93

- Stone et al, '02
- Cohn et al, '04
- Stirman & Pennebaker, '01
- Pennebaker et al., '03
- Ekman
- Carroll & Russel, '96
- Elfenbein & Ambady, '03

WEEK 10

March 30

L8: Relation of question and method II: The influence of common sense theories and examples of addressing the same question using different methods

Experiment Programming
 HW: Complete program, with all stimuli, etc., in a format that is ready to run.

- Pelham Ch 5
- Clark & Hatfield, '89
- Clark & Hatfield, '03

- Ekman
- Carroll & Russel, '96
- Elfenbein & Ambady, '03
- Buss, '03 ('89)

WEEK 11

April 6

L9: Creating a compelling story; How to give a presentation or talk

Review Programs
 HW: Make program adjustments according to feedback. Make appointment with TA this week.

- Pelham Ch 11
- Gilbert & Scholl on giving talks
- Kosslyn Chapters 1-2

- Kosslyn Chapter 7, Appendix

WEEK 12

April 13	L10: What makes a study important	Run in Experiments HW: Collect data, Create PPT	<ul style="list-style-type: none"> • Pelham Ch 9 • Wegner et al., '87 (small Manip, counterintuitive) Wegner, '03	<ul style="list-style-type: none"> • Bushman & Baumeister, '98 (chal theory; import issue) • Gross, '98 (integ theory) • Nisbett & Wilson, '77 (import issue) • Wilson & Schooler, '91 (chal folk wisdom) • Gilbert, Lieberman et al., '04 (chal folk wisdom) Lieberman, Ochsner et al, '01 (chal theory)
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WEEK 13

April 20	TBA	Practice PPT HW: Modify PPT for final presentation	<ul style="list-style-type: none"> • Pelham Ch 10 	None
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WEEK 14

April 27	Group Presentations of Final Experiment: 4 hour class.	HW: Lab Write-Up 3 (Data analysis/write-up for final experiment)	None	None
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WEEK 15

May 4	Last Exam	Experiment 3 write-up due 6PM, Weds May 3. No lab this week.		
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WEEK 16

May 11	NOTHING! You're done!
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IV. Course requirements

Each week, students will attend a two hour lecture on Monday afternoon and a two hour Lab section later in the week. Lectures will present material that will be amplified and exemplified during Lab exercises and experiments. Attendance for Lab sections is mandatory, and discussion/participation during sections is strongly encouraged and counts towards each student's final grade. In the Lab section students will complete an initial exercise (QuALMRI) to introduce them to the logic and design of psychological experiments. In subsequent sections they will complete an experiment of their own design in groups, and will prepare written Lab reports of design and results using the QuALMRI format. Students will also participate in several experiments. Data for all experiments will be collected in Lab sections. For the final experiment students will present the results of their group projects to the class, and all group members must participate in the presentation. One midterm will be given as well as a final exam. Exams will emphasize application of knowledge to design and critique of real and hypothetical experiments.

Grading is allocated as follows:

Lab participation	8%
QuALMRI Exercise	5%
Lab write-up 1	9%
Lab write-up 2	9%
Lab write-up 3	9%
Final group presentation	10%
Participation in Lecture	5%
Midterm exam	20%
End of Term exam	25%