

Psychology 1450
Experimental Psychology: Social Cognition and Emotion
FALL 2016

I. Who, When, Where

Instructor: Prof. Kevin Ochsner
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TAs: Nir Jacoby, email: nj2319@columbia.edu
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Lectures: 4:10 to 6:00 pm Monday, 614 Schermerhorn Hall

Lab: Section 1: Monday 6:10 to 8:00 pm, Scherm. 200B (TA: Jocelyn)
Section 2: Monday 6:10 to 8:00 pm, Scherm. 200C (TA: Katherine)
Section 3: Monday 8:10 to 10:00 pm, Scherm. 200B (TA: Jocelyn)
Section 4: Tuesday 6:10 to 8:00 pm, Scherm. 200C (TA: Katherine)
Section 5: Wednesday 12:10 to 2:00 pm, Scherm. 200B (TA: Nir)

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:

1. Pelham, B. W. & Blanton, H. (2013). *Conducting research in psychology-measuring the weight of smoke*. 4th Edition. New York: Wadsworth Press. (reserved at the Science and Engineering Library located in the Northwest Corner building)
2. Course Reader articles available on Courseworks.
3. Brian Scholl's notes on how to give a presentation: <http://www.yale.edu/perception/Brian/misc/musings/bjs-presentation-notes.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 as supplementary readings on Courseworks. You are not required to read the original sources, but you certainly would benefit from doing so.

IV. Academic Integrity

The University now requires that syllabi include discussion of the importance of academic integrity in your studies at Columbia:

The intellectual venture in which we are all engaged requires of faculty and students alike the highest level of personal and academic integrity. As members of an academic community, each one of us bears the responsibility to participate in scholarly discourse and research in a manner characterized by intellectual honesty and scholarly integrity. In practical terms, this means that, as students:

- You must be responsible for the full citations of others' ideas in all of your research papers and projects
- You must be scrupulously honest when taking your examinations
- You must always submit your own work and not that of another student, scholar, or internet agent.

From the Faculty Statement on Academic Integrity (www.college.columbia.edu/academics/integrity-statement):

- Students are expected to do their own work on all tests and assignments for this class [the group research project excepted] and act in accordance with the Faculty Statement on Academic Integrity and Honor Code established by the students of Columbia College and the School of General Studies.
- Because any academic integrity violation undermines our intellectual community, students found to have cheated, plagiarized, or committed any other act of academic dishonesty can expect to receive a zero for the work in question and may fail the class.
- Students will also be referred to the Dean's Disciplinary Process (see: www.college.columbia.edu/academics/disciplinaryprocess).

It is students' responsibility to ensure their work maintains expected standards. Should you have any questions or concerns regarding these expectations, please:

- Talk with the instructor
- Refer to the Columbia University Undergraduate Guide to Academic Integrity: www.college.columbia.edu/academics/academicintegrity

V. Course Outline, Readings, and Assignments

Date	Lecture Topics	Lab Topics	Textbook and Course Reader Assignments	Expts discussed in Lecture,
WEEK 1				
Sept 12	L1: Introduction, philosophy of science/course, observation, Intro to QuALMRI	Introduction, how to generate and test a question, discussion format/lab culture, ethics, online IRB training, QuALMRI handout <u>ASN:</u> Williams & Bargh QuALMRI & Online IRB Training	<ul style="list-style-type: none"> • Pelham Ch 1 	<ul style="list-style-type: none"> • Cohen et al, '96
WEEK 2				
Sept 19	L2: Goals of research, Question & Hypotheses, Defining your phenomena, Assumptions behind social psych research	Lab experiment: data collection. Intro to lit search, QuALMRI handout <u>Due:</u> Williams & Bargh QuALMRI exercise. <u>ASN:</u> Exp. Design Proposal	<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, '86 (priming, auto) • Devine et al, '89 (auto/con)
WEEK 3				
Sept 26	L3: The logic of experimental design, correlations, confounds, IVs, DVs, True vs. quasi expts	W&B QuALMRI feedback, Group project assignment. <u>Due:</u> Exp. Design Proposal. <u>ASN:</u> Affective Priming QuALMRI	<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				
Oct 3	L4: Logic and Method for studies of individual differences; reliability, validity	Group project assignment. <u>Due:</u> Affective Priming QuALMRI <u>ASN:</u> Nothing	<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				
Oct 10	L5: Consolidation and skill building in experimental design and analysis	Group experimental design workshop <u>Due:</u> Nothing <u>ASN:</u> Group experiment design PPT	<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

Oct 17	L6: Selecting & Specifying a design, Factors & counterbalancing, Interpreting results – main effects vs. interactions	Group presentations and discussion <u>Due:</u> Group experiment design PPT <u>ASN:</u> nothing.	<ul style="list-style-type: none"> • Leary et al, '95 • Leary '03 	<ul style="list-style-type: none"> • Newman et al., '97
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WEEK 7

Oct 24	MIDTERM: Covers Weeks 1-6	Group discussion & material prep <u>Due:</u> nothing. <u>ASN:</u> Prepare experiment materials; begin piloting experiments in section as appropriate		
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WEEK 8

Oct 31	L7: Capturing the real world: Opportunistic & quasi-experiments; Relation of question and method I: how theory constrains the questions you ask	Finalize and make adjustments to experiment materials according to TA feedback. Obtain TA approval for FINAL version of experiment. <u>Due:</u> nothing; begin piloting experiments in section as appropriate <u>ASN:</u> Submit packet to 406 Scherm by Fri, Nov 11, 3PM.	<ul style="list-style-type: none"> • Pelham Ch 7 • Pennebaker et al, '93 	<ul style="list-style-type: none"> • Stone et al, '02 • Cohn et al, '04 • Stirman & Pennebaker, '01 • Pennebaker et al., '03 • Ekman • Carroll & Russel, '96 • Elfenbein & Ambady, '03
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WEEK 9

Nov 7	No Lecture – University Holiday	No lab sections. BUT – Please submit all experiment materials by end of the week.		
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WEEK 10

Nov 14	RUN EXPERIMENTS IN LECTURE!	Enter & Analyze data <u>Due:</u> show data to TA <u>ASN:</u> Final Group PPT (due week 12, final presentation on week 13)		
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WEEK 11

Nov 21	L8: Relation of question and method II: The influence of common sense theories and examples of addressing the same question using different methods	Analyze data, create Group PPT <u>Due:</u> show data/presentation to TA <u>ASN:</u> Final paper (due Dec 13)	<ul style="list-style-type: none"> • Pelham Ch 5 • Clark & Hatfield, '89 • Clark & Hatfield, '03 	<ul style="list-style-type: none"> • Ekman • Carroll & Russel, '96 • Efenbein & Ambady, '03 • Buss, '03 ('89)
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WEEK 12

Nov 28	L9-10: Creating a compelling story; How to give a presentation or talk; What makes a study important	Practice presenting group PPT in section, get TA and classmate feedback <u>Due:</u> Group PPT (with data) <u>ASN:</u> Modify PPT according to class feedback for final presentation	<ul style="list-style-type: none"> • Pelham Ch 9, 11 • Wegner et al., '87 (small Manip, counterintuitive) • Wegner, '03 • Kosslyn Chapters 1-2 	<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) • Kosslyn Chapter 7
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WEEK 13

Dec 5	Present Final Group PPT to entire class: 4 hour class meeting.	NO LAB, meet with TA as needed; work on final paper	Pelham Ch 10	None
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WEEK 14

Dec 12	END OF TERM EXAM	NO LAB, meet with TA as needed <u>Due:</u> Final paper due Friday, Dec 16 at 5 pm		
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VI. 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 an end of term exam. Exams will emphasize application of knowledge to design and critique of real and hypothetical experiments.

Grading is allocated as follows:

Williams & Bargh QuALMRI	5%
Affective Priming QuALMRI	5%
Experimental Design Proposal	5%
Group experiment design PPT	5%
Final Group PPT	10%
Final Paper	15%
Participation	10%
Midterm exam	20%
End of Term exam	25%