I. Who, When, Where

Instructor: Prof. Kevin Ochsner
369 Scherm. Hall
212-854-5548
office hours: By appointment
kochsner@paradox.psych.columbia.edu

TAs: Jenny Porte, jmp2212@columbia.edu
Rebecca Martin, rem2178@columbia.edu
Noam Zerubavel, nz2104@columbia.edu

Lectures: 4:10 to 6:00 pm Monday, 614 Schermerhorn Hall

Lab: Section 1: Monday 6:10 to 8:00 pm, Scherm. 200B (RM)
Section 2: Wednesday 6:10 to 8:00 pm, Scherm. 200B (JP)
Section 3: Monday 8:10 to 10:00 pm, Scherm. 200B (RM)
Section 4: Monday 6:10 to 8:00 pm, Scherm. 200C (NZ)
Section 5: Tuesday 4:10 to 6:00 pm, Scherm. 200B (JP)

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:

2. Course Reader articles available on Courseworks and from Village Copier
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:


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.
<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Topics</th>
<th>Lab Topics</th>
<th>Textbook and Course Reader Assignments</th>
<th>Expts discussed in Lecture, Available on Courseworks Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEEK 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Sept 9   | **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  
ASN: Williams & Bargh QuALMRI | • Pelham Ch 1                                                                  | • Cohen et al, ‘96                        |
|          |                                                     |                                                                            |                                        |                                                          |
|          | **WEEK 2**                                         |                                                                            |                                        |                                                          |
| Sept 16  | **L2**: Goals of research, Question & Hypotheses, Defining your phenomena, Assumptions behind social psych research | Lab experiment: data collection. Intro to lit search, QuALMRI handout  
Due: Williams & Bargh QuALMRI exercise.  
ASN: nothing. | • Pelham Ch 2  
• Greenwald et al, ’98  
• Dasgupta et al., ’03 | • 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 23  | **L3**: The logic of experimental design, correlations, confounds, IVs, DVs, True vs. quasi expts | Lab experiment: data analysis.  
Due: Nothing.  
ASN: Affective Priming QuALMRI | • Pelham Ch 6  
• Gilbert et al, ‘88  
• Gilbert ‘03  
• Fazio ’01 (for lab) | • Gilovich, ’98  
• Gilovich et al., ’00  
• Macrae et al., 03  
• Word, Zanna & Cooper, ‘78 |
|          |                                                     |                                                                            |                                        |                                                          |
|          | **WEEK 4**                                         |                                                                            |                                        |                                                          |
| Sept 30  | **L4**: Logic and Method for studies of individual differences; reliability, validity | W&B QuALMRI feedback, Group project assignment.  
Due: Affective Priming QuALMRI  
ASN: nothing. | • Pelham Ch 3-4  
• Aron et al., ’92 | • Gross & John, ‘95  
• Gross & John, ’97  
• Gross et al., ‘00  
• Barrett et al, ‘01 |
| WEEK 5     | Oct 7 | L5: Selecting & Specifying a design, Factors & counterbalancing, Interpreting results – main effects vs. interactions | Group experimental design workshop  
**Due:** nothing.  
**ASN:** Group experiment design PPT | • Pelham Ch 8  
• Ames ’04 (Intxn)  
• Murray et al, ’96 (Intxn)  
• Bargh et al, ’96 (ME)  
• Chartrand & Bargh, ’99 (ME, Intrxn) |
|-----------|-------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| WEEK 6    | Oct 14| L6: Consolidation and skill building in experimental design and analysis  
**Due:** Group experiment design PPT  
**ASN:** nothing. | Group presentations and discussion  
**Due:** Group experiment design PPT  
**ASN:** nothing. | • Leary et al, ’95  
• Leary ’03  
• Newman et al., ’97 |
| WEEK 7    | Oct 21| MIDTERM: Covers Weeks 1-6  
**Due:** nothing.  
**ASN:** nothing. | Group discussion & material prep  
**Due:** nothing.  
**ASN:** Prepare experiment materials | |
| WEEK 8    | Oct 28| L7: Capturing the real world: Opportunistic & quasi-experiments; Relation of question and method I: how theory constrains the questions you ask  
**Due:** Obtain TA approval for FINAL version of experiment by Wed, October 30. THEN, submit packet to 406 Scherm by Fri, November 1, 3PM.  
**ASN:** Make adjustments to materials according to TA feedback. | Finalize experiment materials  
**Due:** Obtain TA approval for FINAL version of experiment by Wed, October 30. THEN, submit packet to 406 Scherm by Fri, November 1, 3PM.  
**ASN:** Make adjustments to materials according to TA feedback. | • 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 9    | Nov 4 | NO CLASS  
(academic holiday) | NO LAB  
**Due:** nothing.  
**ASN:** nothing. | • None  
**Due:** nothing.  
**ASN:** nothing. |
| WEEK 10 | Nov 11 | **L8**: Relation of question and method II: The influence of common sense theories and examples of addressing the same question using different methods | **RUN EXPERIMENTS IN LAB!** ASN: Get packets with data from 406 Schermerhorn on Thursday, November 14 after 12PM. Enter/analyze data. | • Pelham Ch 5  
• Clark & Hatfield, ’89  
• Clark & Hatfield, ’03 | • Ekman  
• Carroll & Russel, ’96  
• Elfenbein & Ambady, ’03  
• Buss, ’03 ('89) |

| WEEK 11 | Nov 18 | **L9**: Creating a compelling story; How to give a presentation or talk | Create Final Group PPT  
**Due:** show data/presentation to TA  
ASN: Final Group PPT (due week 12, presented again on week 13). Final paper (due December 16) | • Pelham Ch 11  
• Scholl website on giving talks  
• Kosslyn Chapters 1-2 | • Kosslyn Chapter 7 |

| WEEK 12 | Nov 25 | **L10**: What makes a study important | Present Final Group PPT, get TA and classmate feedback  
**Due:** Final Group PPT (with data)  
ASN: Modify PPT according to class feedback for final presentation; continue working on final paper | • Pelham Ch 9  
• Wegner et al., ’87 (small Manip, counterintuitive)  
• Wegner, ’03 | • 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) |

<p>| WEEK 13 | Dec 2 | Present Final Group PPT to entire class: 4 hour class meeting. | <strong>NO LAB, meet with TA as needed</strong> | • Pelham Ch 10 | None |</p>
<table>
<thead>
<tr>
<th>WEEK 14</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 9</td>
<td>End of Term Exam</td>
<td>NO LAB, meet with TA as needed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WEEK 15</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 16</td>
<td>Work on Final Paper</td>
<td>Due: Final paper due Dec 16 at 5pm</td>
</tr>
</tbody>
</table>
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:
- Williams & Bargh QuALMRI 5%
- Affective Priming QuALMRI 10%
- Group experiment design PPT 5%
- Final Group PPT 10%
- Final Paper 15%
- Participation 10%
- Midterm exam 20%
- End of Term exam 25%