Psychology 1455 Experimental Psychology: Social and Personality Spring 2015

Course Description

PSYC W1455. Experimental Psychology: Social and Personality. 4 points. N. Bolger. Office 402A Schermerhorn Hall. Office hours: M 2:00-4:00 Lecture M 10:10-12:00. Room 200B Schermerhorn Hall. Lab Sections will meet in 200C Schermerhorn Hall.

Pre-requisites: An introductory psychology course and a behavioral statistics course such as PSYC W1610 or

STAT W1101 or W1111 or the equivalent.

Co-requisite: PSYC W1456 (lab section) Section 1: W 10:10 -12:00; TA: Kenzie Snyder

Section 2: W 2:10 - 4:00; TA: Kenzie Snyder

Description for bulletins

Methodology and procedures of personality and social psychological research and exercises in data analysis and research design. Ethical issues in psychological research. Statistical concepts such as parameter estimation and testing, measurement reliability and validity, merits and limitations of correlational and experimental research designs, and empirical evaluation of theories.

Description for syllabus

Topics:

- Methodology and procedures of personality and social psychological research and exercises in data analysis and research design.
- Ethical issues in psychological research.
- Statistical concepts such as parameter estimation and testing, measurement reliability and validity, merits and limitations of correlational and experimental research designs, and empirical evaluation of theories.

This course is designed to introduce students to a range of research methods used in experimental psychology, with particular reference to those used to understand personality and social behavior. In addition to reading about and discussing methods, students will engage in hands-on research to answer a specific research question, specified by small groups within the class. Through conceptualizing and executing a research project, students will gain first-hand experience with selecting and formulating a research question, conducting a literature review, formulating specific hypotheses, designing a empirical study, collecting data, carrying out statistical analyses of those data, presenting the results in class, and writing a paper summarizing the study in the form specified the American Psychological Association Style Manual.

The primary goals of this course are twofold. The first is to enable students to critically evaluate behavioral research using rules of evidence and knowledge building employed by experimental psychologists. The second is to enable students to explore a substantive area of interest using valid empirical research methods. The focus of the course will move back and forth between these goals throughout the semester.

Rationale for Taking the Course

The primary role of PSYC 1455 in the Psychology curriculum will be to fulfill the laboratory requirements of the Psychology major, the Neuroscience and Behavior major, and the Post-bac psychology program. The introductory course (W1001 or W1010) and this course constitute a coherent introduction to the empirical science of psychology. By providing students with practical exposure to data collection and their subsequent analysis and interpretation, W1455 provides students the opportunity to develop the methods and skills of the discipline of psychology. Together with an introductory statistics course (e.g., PSYC W1610), W1455 will serve as an intensive introduction to research methods and statistics, thus providing the essential foundation for more advanced psychology courses, individual research, and graduate study.

Psychology majors and concentrators, as well as students in the Post-bac Psychology program, who do not apply PSYC W1455 to their laboratory requirement, may use it to meet the Group III (Social, Personality, and Abnormal) distribution requirement. PSYC W1455 will also count as a Group III course for purposes of the psychology minor in Engineering; engineering students will be accommodated in the course after majors and psychology post-bacs.

Main Text: Cozby, P., Methods in Behavioral Research (11th Ed.). Mountain View, CA: Mayfield

Additional weekly readings will be listed (and posted) on the courseworks class web-site. Please see Appendix for complete citations.

Course Outline, Readings, and Assignments

PLEASE PUT YOUR NAME AND LAB SECTION ON EVERY ASSIGNMENT HANDED IN EVEN IF IT IS DUE IN CLASS.

WEEK	CLASS / LAB	TOPIC	WHAT IS DUE
Week 1	Class 1 W Jan 23 Labs W Jan 23/	Initial Meeting Introduction to web-based survey; Set of empirical papers for use in project formulation (available on Courseworks). Introduction to R statistical software FOR NEXT WEEK: READING: Set of empirical articles, Cozby, Ch.1	
Week 2	Class 2a M Jan 28	Overview and Organization Personal introductions; Class overview; Themes in the set of empirical papers. The Research Endeavor	

			
		Cozby, Ch. 1	
	W Jan 30 Labs	Problem formulation Small groups of 3-5 students with common interests will be identified, based in part on their reading of the empirical papers.	
W Jan 30	FOR NEXT WEEK: READING: Cozby, Ch. 4		
		ASSIGNMENT 1 (DUE IN CLASS FEB 4): Pick the two articles that most interest you, and write a 2-page paper that relates some aspect of those articles to your own experiences or the experiences of those close to you. This analysis should end with possible research questions, at least two. Bring two copies of this paper to the next class: one for the instructor and one for the small group discussion.	
Week 3	Class 3	Types of Research Designs	Assignment
	M Feb 4	Cozby Ch. 4	1 due in
		ASSIGNMENT 2 (DUE IN LAB, FEB 6/7): Each of the research groups will be responsible for leading a 15-20 minute discussion about the designs and methods used in their target article. This discussion will illustrate the concepts discussed in Cozby Chapter 4, including independent and dependent variables, internal and external validity, type of sampling, types of control, potential confounding variables, and mediating variables (if applicable).	class
	Labs W Feb 6	Discussion of Assignment 2 and Research Designs; R Data Analysis Students will lead the discussion on each article in small groups. This will be followed by practice using R to analyze data from the web	A :
		FOR NEXT WEEK: READING: 1. Cozby, Ch. 3 and 5 2. Cohen et al. (1996)	Assignment 2 due in lab
		ASSIGNMENT 3 (DUE IN CLASS, FEB 11): Evaluate (a) the Cohen et al (1996) article and (b) your target article in terms of any two of the following ethical issues: (i) autonomy, (ii) beneficence, (iii) deception, and (iv) justice. Write one paragraph for each paper and each issue (i.e., four paragraphs total). Be prepared to discuss your answers in class.	
		ASSIGNMENT 4 (DUE IN LAB, FEB 13/14): Each research group will lead a discussion that critiques (i.e., evaluates the strengths and weaknesses of) the measurement procedures used in their target article. The measurement issues should include: scales of measurement,	

		reliability, validity, and reactivity.	
Week 4	Class 4 M Feb 11	Ethics Cozby, Ch. 3 Measurement Cozby, Ch. 5	Assignment 3 due in class
	Labs W Feb 13	Measurement (Discussion of target article based on Assignment 4) R data analysis: Computing reliability coefficients. FOR NEXT WEEK: READING: Cozby, Ch. 2 with special attention to pages 20-30. ASSIGNMENT 5 (DUE IN CLASS, FEB 18): Think of at least two hypotheses or research questions that you and your group might want to examine for your class project. Write a short paragraph on each question/hypothesis. Bring two copies to class, one for your group and one for the professor. Be ready to discuss your ideas with your group members and with the rest of the class.	Assignment 4 due in lab
		ASSIGNMENT 6 (DUE IN LAB, FEB 20/21): For the hypotheses you and your group are considering investigating; create a list of 'search terms' that you think would help you to locate articles related to your ideas. Create a sheet with at least one hypothesis and associated search terms. Make two copies for the next lab. You will use these lists during the library visits.	
Week 5	Class 5 M Feb 18	Formulating hypotheses for your research project Cozby, Ch. 2 The first half of the class will involve pooling the hypotheses/questions developed by each group member in Assignment 5, and working on developing a single group project. Be sure to include in your discussion issues brought up in previous classes, namely, research design, how variables could be measured, and how to make procedures ethical. In the second half of the class, each group will report on their discussions. It is not necessary to settle on a specific project at this stage; groups can be considering more than one possible project. Literature Search	Assignment 5 due in class
	Labs	You will perform a literature search and obtain copies of relevant papers and documents. Bring two copies of the sheet containing your hypotheses and search terms. More practice with R	

Wester	W Feb 20	FOR NEXT WEEK: READING: Cozby, Ch.8, 9, 10, 12 ASSIGNMENT 7 (DUE IN CLASS, FEB 25): Propose an experimental study that tests one of your hypotheses. Summarize your idea in an 1-page paper. Be sure to specify the type of experimental design (e.g. within-subject design, between-subject design, one-factor, two-factor, etc.). How would you address any potential confounding variables? Also, be sure to operationally define both the independent and dependent variables. ** Begin work on a draft of the introduction to your final research paper (see Handout). This should incorporate the hypotheses you generated for the literature search and at least 3 articles that you found in your search.	Assignment 6 due in lab
Week 6	Class 6 M Feb 25	Experimental Designs I Bring two copies of Assignment 7 to class. Discuss your proposal with your group members, and work to develop a common experimental design. Before the end of class each group will report on their progress.	Assignment 7 due in class
	Class 6	Experimental Designs II	
	Labs W Feb 27	Data Analysis Practice using R Today you will get experience carrying out an independent-samples t- test and calculating a Pearson correlation/simple linear regression.	Assignment 8 due in lab
		FOR NEXT WEEK: ASSIGNMENT 8 (DUE IN CLASS, MARCH 3): Propose a correlational design that tests your hypothesis. Summarize your idea in a 1-page paper. Specify the type of correlational design (i.e., cross-sectional, longitudinal, archival, etc. Discuss possible confounding variables and how you propose to handle them. On a separate sheet, write a paragraph that discusses the pros and cons of using an experimental vs. a correlational design to test your hypothesis.	
		READING: In preparation for the Review Session and the In-Class Examination, review all the readings, handouts and class notes to date.	

Week 7	Class 7 M Mar 3	Correlational Designs Bring two copies of Assignment 8 to class. Discuss your proposal with your group members, and work to develop a common correlational design. Before the end of class each group will report on their progress.	
		Combining correlational and experimental designs.	
	Labs W Mar 5	Review Session	
		FOR NEXT WEEK:	
		READING: Cozby, Ch. 7	Assignment 8 due
		Finish Writing Draft of Introduction	
Week 8	Class 8 M Mar 10	<u>In-Class Examination</u>	
		ASSIGNMENT 9 (DUE IN CLASS, MARCH 24): Each group will bring in draft questionnaires/ tests/measures to be given to class members. If you feel your questionnaire is ready, please bring sufficient copies to begin data collection from your classmates.	
		Measurement exercises (survey/interview) During Weeks 8-9 you will gather and/or construct a set of items/questions relevant to your group's class project, collect data from class members, enter the data, and conduct preliminary analyses	
	Labs W Mar 12	Group Discussion During this lab, we will discuss what makes for a good questionnaire and begin data collection. Groups needing to revise their questionnaires will do so. Others will begin data collection.	
		Due: Draft of Introduction to be e-mailed to respective TA by 5pm on Friday, March, 14th.	Draft of introduction due
March 17 -21	NO CLASS & LAB	SPRING BREAK (Collect Data or Finalize Questionnaires)	
Week 9	Class 9 M Mar 24	Designing questionnaires Collect data from class members. If you already collected data from your lab section mates, this is your chance to collect data from your other classmates.	Assignment 9 due in class

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	Labs W Mar 26	Collect and input data Data collected will be entered into R. FOR NEXT WEEK: READINGS: Cozby, Ch. 13, Appendix B (Again) ASSIGNMENT 10 (DUE IN LAB, APRIL 2/3): Bring a list to class detailing the statistical analyses that you think will be necessary to conduct to analyze your group's data. Organize the list in the order that you think analyses should be conducted. For example, you will first want to conduct 'descriptives' to assure that your data were entered correctly. Think about what analyses you will want to conduct that will test your hypotheses.	
Week 10	Class 10	Statistics review/Doing Analyses in R	
	M Mar 31	Discussion of questionnaires and begin analyses We will discuss the questionnaires each group developed as well as review your lists of potential analyses. Class members will provide feedback for each other. Groups will begin running analyses.	
	Labs W Apr 2	Data Entry/Analysis of Preliminary data	Assignment 10 due in lab
		FOR NEXT WEEK: ASSIGNMENT 11 (DUE IN CLASS, APRIL 7): Each group will prepare a 10-minute presentation based on the findings from their questionnaire study. Class members will provide feedback. Alternative Assignment for groups that are still having questionnaire issues: this will be your last chance to finalize your questionnaire for data collection. Bring the final questionnaire copies to the next class and lab.	
Week 11	Class 11 M Apr 7	Presentation of preliminary results	Assignment 11 due in class
	Labs W Apr 9	Presenting Data Graphically in R	

		FOR NEXT WEEK: ASSIGNMENT 12 (DUE IN CLASS, APRIL 14): Using the guidelines for APA style methods and results sections (available on Courseworks), you will turn in a short paper describing the findings from your group's questionnaire study. This paper will not require you	
		to write a full methods section but you should write a results section	
		written in formal APA style.	
Week 12	Class 12 M Apr 14	Revised questionnaire distributed for final pilot test Collect data	Assignment 12 due in class
		FOR NEXT WEEK:	
		DUE IN CLASS, APRIL 21: draft of the method section	
		READING: Bem's writing an empirical research paper chapter	
	Labs		
Week 13	W Apr 1 Class 13	Collect data Collect data; Begin Analyses of Final Data (Due: Draft of the method	Draft of
Week 13	M Apr 21	section)	methods section
	Labs W Apr 21	Finish Analyses	
		FOR NEXT WEEK:	
*** 1 4 4	G1 4.4	DUE IN CLASS, DRAFT OF RESULTS SECTION	D 0 0
Week 14	Class 14 M Apr 28	Final Presentations (Due: Draft of results section)	Draft of results section
	Lab 14 W Apr 30	(Preparation for Presentations)	
Week 15	Class 15 M May 5	Final Presentations (and final class)	
	W May 7	FINAL PAPER IS DUE ON WEDNESDAY, MAY 7	Final Paper

Course requirements

This course <u>incorporates aspects of both</u> seminar <u>and laboratory</u> formats. While it will include presentations of material by instructor and TA, <u>it will also feature</u> participation and presentations/discussions by students (individually and in small groups), and a hands-on research project. Some laboratory work will be completed during class time whereas other work will be completed outside of class but presented in class. Students will be evaluated throughout the semester using a variety of formats including short quizzes, short written assignments, class presentations, and a final term paper. Attendance is required at all classes and lab sessions.

There are many short assignments to be completed for the course; each is intended to either facilitate laboratory work or to enable students to develop and/or practice particular research skills. Assignments vary in format. Some are merely lists; some are brief papers; and some are small group or individual presentations. An in-class examination will cover the text, exercises, and assigned articles. A final paper is due at the end of the semester. The paper is a final report on a research project conducted throughout the term, and will include all standard sections of an empirical paper including introduction and statement of the research problem, review of the literature, methods, results, and conclusions.

Breakdown of course grade:

Mid-term examination 15%
Final presentation 15%
Drafts of paper sections
Introduction (5%)
Methods (5%)
Results (5%)

Final research paper 25%

Short assignments and class participation 30%

Class and University Policies

Academic Integrity

"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 -

https://www.college.columbia.edu/academics/integrity-statement.

You are expected to always act in accordance with the Columbia honor code. Any student found cheating or plagiarizing in this class will be reported to Columbia's Office of Judicial Affairs and Community Standards for evaluation and academic discipline.

If you have questions about any aspect of academic integrity at Columbia, please refer to the following link: https://www.college.columbia.edu/academics/integrity and if you have specific questions about sanctions or the judicial process: see https://www.college.columbia.edu/academics/disciplinaryprocess

Students with Disabilities:

Students with disabilities taking this course who may need disability-related classroom accommodations are encouraged to let me know as soon as possible. Also, stop by the Office of Disability Services (ODS) Wien Hall Suite 108A to register for support services, if you have not done so already. ODS Phone (212) 854-2284. Students who are eligible for extra exam time should be certain to fill out the appropriate paperwork at the Office of Disability Services. Once I have received confirmation of your status, I will be able to make arrangements for additional exam time. Note that ODS often requires 2 weeks to process an application, so don't wait until midterm week to get in touch with them.

Appendix: Details on Assigned Readings Other Than Textbook

Set of Empirical Articles for Week 1

- Cohen, D., Nisbett, R. E., Bowdle, B. F., & Schwarz, N. (1996). Insult, aggression, and the Southern Culture of Honor: An "experimental ethnography.". *Journal of Personality and Social Psychology*, 70, 945-960.
- Hong, Y.-y., Chiu, C.-y., Dweck, C. S., Lin, D. M.-S., & Wan, W. (1999). Implicit theories, attributions, and coping: A meaning system approach. *Journal of Personality and Social Psychology*, 77, 588.
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of personality and social psychology*, 69, 797.
- Triandis, H. C., McCusker, C., & Hui, C. H. (1990). Multimethod probes of individualism and collectivism. *Journal of personality and social psychology, 59*, 1006.
- Dutton, D. G., & Aron, A. P. (1974). Some evidence for heightened sexual attraction under conditions of high anxiety. *Journal of personality and social psychology*, 30, 510.
- Abbey, A. (1982). Sex differences in attributions for friendly behavior: Do males misperceive females' friendliness? *Journal of Personality and Social Psychology*, 42, 830-838.

Reading Assigned in Week 3

Cohen, D., Nisbett, R. E., Bowdle, B. F., & Schwarz, N. (1996). Insult, aggression, and the Southern Culture of Honor: An "experimental ethnography.". *Journal of Personality and Social Psychology*, 70, 945-960.

Reading Assigned in Week 12

Bem, D. J. (2003). Writing the empirical journal article. In J. M. Darley, M. P. Zanna & H. L. Roediger (Eds.), *The compleat academic : A career guide* (2nd ed.). Washington, DC: American Psychological Association.