

Psychology 1455
Experimental Psychology: Social and Personality
SPRING 2008.

Course Description

PSYC W1455. Experimental Psychology: Social and Personality. 4 points.

N. Bolger. [M,W 10:35-11:50] Room 614 Schermerhorn Hall. All Lab Sections will meet in 200B Schermerhorn Hall.

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

Co-requisite: PSYC W1456 (lab section) Section 1: Wed 6:10-8pm; TA: Alexandra Suppes
Section 2: Thu 6:10-8pm; TA: Vanessa Anderson

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 an 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 in 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 W1450 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 (9th Ed.). Mountain View, CA: Mayfield

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 Lab 1 W Jan 23/ Th Jan 24	<u>Initial Initial Meeting</u> Introduction to web-based survey; Set of empirical papers for use in project formulation (available on Courseworks). <u>Introduction to R statistical software</u> FOR NEXT WEEK: READING: Set of empirical articles	
Week 2	Class 2a M Jan 28 Class 2b W Jan 30 Lab 2 W Jan 30/ Th Jan 31	<u>Overview and Organization</u> Personal introductions; Class overview; Themes in the set of empirical papers. FOR NEXT CLASS: Cozby, Ch. 1. <u>The Research Endeavor</u> <u>Problem formulation</u> Small groups of 3-5 students with common interests will be identified, based in part on their reading of the empirical papers. 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	<p>Class 3a M Feb 4</p> <p>Class 3b W Feb 6</p> <p>Lab 3 W Feb 6/ Th Feb 7</p>	<p><u>Types of Research Designs</u> Cozby Ch. 4</p> <p>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).</p> <p><u>Types of Research Designs (contd.)</u> Cozby, Ch. 4</p> <p><u>Discussion of Assignment 2 and Research Designs; R Data Analysis</u> 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 survey.</p> <p>FOR NEXT WEEK: READING: 1. Cozby, Ch. 3 and 5 2. Cohen et al. (1996)</p> <p>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, 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.</p> <p>ASSIGNMENT 4 (DUE IN LAB, FEB 13/14): Each research groups 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.</p>	<p>Assignment 1 due in class</p> <p>Assignment 2 due in lab</p>
Week 4	<p>Class 4a M Feb 11</p> <p>Class 4b W Feb 13</p> <p>Lab 4 W Feb 13/ Th Feb 14</p>	<p><u>Ethics</u> Cozby, Ch. 3</p> <p><u>Measurement</u> Cozby, Ch. 5</p> <p><u>Measurement</u> (Discussion of target article based on Assignment 4) R data analysis: Computing reliability coefficients.</p>	<p>Assignment 3 due in class</p> <p>Assignment 4 due in lab</p>

		<p>FOR NEXT WEEK: READING: Cozby, Ch. 2 with special attention to pages 20-30.</p> <p>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.</p> <p>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.</p>	
Week 5	<p>Class 5a M Feb 18</p> <p>Class 5b W Feb 20</p> <p>Lab 5 W Feb 20/ Th Feb 21</p>	<p><u>Formulating hypotheses for your research project</u> 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.</p> <p><u>Literature Search</u> You will perform a literature search and obtaining copies of relevant papers and documents. Bring the two copies of your sheet containing your hypotheses and search terms.</p> <p><u>More practice with R</u></p> <p>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.</p> <p>** Begin work on a draft of the introduction to your final research paper</p>	<p>Assignment 5 due in class</p> <p>Assignment 6 due in lab</p>

		(see Handout). This should incorporate the hypotheses you generated for the literature search and at least 3 articles that you found in your search.	
Week 6	Class 6a M Feb 25	<u>Experimental Designs I</u> 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 6b W Feb 27	<u>Experimental Designs II</u>	
	Lab 6 W Feb 27/ Th Feb 28	<u>Data Analysis Practice using R</u> 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 an 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 7a M Mar 3	<u>Correlational Design</u> 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.	
	Class 7b W Mar 5	<u>Combining correlational and experimental designs.</u>	
	Lab 7 W Mar 5/ Th Mar 6	<u>Review Session</u>	
		FOR NEXT WEEK:	

		<p>READING: Cozby, Ch. 7</p> <p>Finish Writing Draft of Introduction</p>	Assignment 8 due
Week 8	<p>Class 8a M Mar 10</p> <p>Class 8b W Mar 12</p> <p>Lab 8 W Mar 12 Th Mar 13</p>	<p><u>In-Class Examination</u></p> <p>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.</p> <p><u>Measurement exercises (survey/interview)</u> 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</p> <p><u>Group Discussion</u> 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.</p> <p>Due: Draft of Introduction to be e-mailed to respective TA by 5pm on Friday, March, 14th.</p>	Draft of introduction due
March 17-21	NO CLASS & LAB	SPRING BREAK (Collect Data or Finalize Questionnaires)	
Week 9	<p>Class 9a M Mar 24</p> <p>Class 9b M Mar 26</p> <p>Lab 9 W Mar 26 Th Mar 27</p>	<p><u>Designing questionnaires</u> 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.</p> <p><u>Designing questionnaires (contd.)</u></p> <p><u>Collect and input data</u> Data collected will be entered into R.</p> <p>FOR NEXT WEEK: READINGS: Cozby, Ch. 13, Appendix B (Again)</p> <p>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</p>	Assignment 9 due in class

		test your hypotheses.	
Week 10	<p>Class 10a M Mar 31</p> <p>Class 10b W Apr 2</p> <p>Lab 10 W Apr 2/ Th Apr 3</p>	<p><u>Statistics review/Doing Analyses in R</u></p> <p><u>Discussion of questionnaires and begin analyses</u> 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.</p> <p><u>Data Entry/Analysis of Preliminary data</u></p> <p>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.</p>	Assignment 10 due in lab
Week 11	<p>Class 11a M Apr 7</p> <p>Class 11b W Apr 9</p> <p>Lab 11 W Apr 9/ Th Apr 10</p>	<p><u>Presentation of preliminary results</u></p> <p><u>More presentation of preliminary results; More feedback</u></p> <p><u>Presenting Data Grapically in R</u></p> <p>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.</p>	Assignment 11 due in class
Week 12	<p>Class 12a M Apr 14</p> <p>Class 12b W Apr 16</p>	<p><u>Revised questionnaire distributed for final pilot test</u></p> <p><u>Collect data</u></p> <p>FOR NEXT WEEK:</p>	Assignment 12 due in class

	Lab 12 W Apr 16/ Th Apr 17	DUE IN CLASS, APRIL 21: draft of the method section READING: Bem's writing an empirical research paper chapter <u>Collect data</u>	
Week 13	Class 13a M Apr 21 Class 13b W Apr 23 Lab 13 W Apr 21/ Th Apr 22	<u>Collect data; Begin Analyses of Final Data (Due: Draft of the method section)</u> <u>Collect data; Begin Analyses of Final Data</u> <u>Finish Analyses</u> FOR NEXT WEEK: DUE IN CLASS, DRAFT OF RESULTS SECTION	Draft of methods section
Week 14	Class 14a M Apr 28 Class 14b W Apr 30 Lab 14 W Apr 30/ Th May 1	<u>Final Presentations (Due: Draft of results section)</u> <u>Final Presentations</u> (Preparation for Presentations)	Draft of results section
Week 15	Class 15a M May 5 W May 7	<u>Final Presentations (and final class)</u> FINAL PAPER IS DUE ON WEDNESDAY, MAY 7	Final Paper

V. Course requirements

This course uses a seminar format and includes presentations of material by the instructor and TA, 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 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 research 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	15%
Introduction (5%)	
Methods (5%)	
Results(5%)	
Final research paper	25%
Short assignments and class participation	30%