

RESEARCH METHODS (Psyc 201) Brief Course Overview

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Course Description:

Welcome to Research Methods! This course provides an overview of the design and conduct of psychological research. Together, we will examine the ethical, design, measurement, and dissemination issues that researchers face in their studies of human and animal behavior and thought. You will also have hands-on opportunities to apply and practice your research skills by designing and carrying out your own psychological research study. *Please feel free to ask questions at any point along the way* – many of these concepts and skills will be unfamiliar to you, and I encourage you to be active in resolving areas of confusion.

Course Structure:

This course meets twice a week for 140 minutes and bears 1.5 credits. The course has two components: (1) a lecture component in which background and concepts regarding the design and conduct of psychological research will be presented and discussed; and (2) a lab component in which you will apply the ideas from lecture to class exercises and the design and execution of a group research project. You will present the results of your group project in both APA manuscript form and as a formal poster at the Psychology Department's Annual Research Colloquium on April 24, 2008. The first half of the course will be more lecture-based; as we move toward the second half of the course, we will devote more time to the lab component, including your group project. All sections of this course will follow the same basic course structure, but there will be some differences in content, scheduling, and grading. In this section, class sessions will be a combination of lecture, discussion, and individual/group exercises. Though not a formal component of your course grade, class participation is required.

Group Work:

A substantial portion of this course involves working in a group. Each group will select a research topic, review the relevant literature(s), formulate research hypotheses, design a study that tests those hypotheses, write and orally present a research proposal, collect primary data, analyze and interpret their empirical findings, write an APA-style manuscript about the study, and prepare and present a formal research poster in a talk at the Psychology Department Research Colloquium in April. Collaborating with peers on a project is a valuable aspect of the learning process that entails cooperation, compromise, accountability. No matter where your studies take you, you will likely be working with colleagues in some capacity, and this project will provide you hands-on practice. Please note, however, that there are some risks associated with this kind of project. Ideally, each member of the group should contribute *equally* to the work, with no one member doing too much or too little. It is expected that all group members will contribute equally to every stage of the research project. Thus, each group member will receive the same grade for group-related assignments. However, I will monitor individual contributions to the project and adjust grades as necessary.

Scientific Writing:

One main objective of this course is the development of American Psychological Association (APA) style scientific writing skills. We will spend much time in class reviewing the specific details of APA style, and you will also have many opportunities to practice various stages of the scientific writing process through in-class writing workshops. In addition, the report of your group research project will be written incrementally throughout the semester. You will write and revise several *drafts* of your paper, thus experiencing first-hand the developmental nature of scientific writing. Through this process, you will see that a good manuscript matures with each critical evaluation. Improvements across drafts require you first to notice, then *actively* work to correct, areas of weakness. I encourage you to take every opportunity to practice your scientific writing. I am happy to work with you in this regard.

Course Objectives:

In sum, this course has several goals. During our time together, I hope that you will: (a) build knowledge regarding the design and conduct of psychological research; (b) apply this knowledge to the design and conduct of your own group research project; (c) appreciate and apply appropriate ethical considerations in the design and conduct of your project; (d) learn to use statistical software (SPSS) to analyze your research results; (e) improve your scientific writing skills; and (f) strengthen your ability to communicate research findings orally before an academic audience. And remember, please feel comfortable asking questions at any time during the course!

Course Requirements

Exams (50%)

Midterm I (non-cumulative)	20%
Midterm II (non-cumulative)	15%
Final Exam (cumulative; oral)	15%

Assignments & Quizzes (15%)

Research Project (35%)

Proposal	18%
Final Report (oral presentation & paper)	17%

Readings:

Stangor, C. (2007). *Research methods for the behavioral sciences (3rd ed.)*. New York: Houghton Mifflin.
[Required]

American Psychological Association (2001). *Publication manual of the American Psychological Association (5th ed.)*. Washington, DC: Author. [Recommended]

In addition to the above texts, you will complete the following supplemental readings:

Biklen, D. & Cardinal, D. N. (1997). Framing the issue: Author or not, Competent or not? In D. Biklen & D. N. Cardinal (Eds.), *Contested words, contested science: Unraveling the facilitated communication controversy* (pp. 5-33). New York: Teachers College Press.

- Bordens, K. S., & Abbott, B. B. (1999). Chapter 2: Developing ideas for research. From *Research Designs and Methods: A Process Approach* (4th ed.). Mountain View, CA: Mayfield.
- Burgess, C. A., Kirsch, I., & Bacon, A. (1998). Facilitated communication as an ideomotor response. *Psychological Science, 9*, 71-77.
- Cardinal, D. N. & Biklen, D. (1997). Summing up: What should not and what can be said about facilitated communication. In D. Biklen & D. N. Cardinal (Eds.), *Contested words, contested science: Unraveling the facilitated communication controversy* (pp. 199-208). New York: Teachers College Press.
- Clark, D. M., et al. (1997). Misinterpretation of body sensation in panic disorder. *Journal of Consulting and Clinical Psychology, 65*, 203-213. (excerpt only).
- Gustafson, R. (1987). Alcohol and acceptance of social inference: A preliminary study. *Psychological Reports, 60*, 488-490.
- Heller, M. A.. (1984). Active and passive touch: The influence of exploration time on form recognition. *Journal of General Psychology, 110*, 243-249.
- Heller, M. A., & Myers, D. S. (1983). Active and passive tactile recognition of form. *Journal of General Psychology, 108*, 225-229.
- Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *The Journal of Marriage and Family, 50*, 93-98.
- Humphreys, A. P. & Smith P.K. (1987). Rough-and-tumble, friendship, and dominance in schoolchildren: evidence for continuity and change with age. *Child Development, 58*, 201-212.
- Ishee, J. H., & Titlow, L. W. (1986). Diurnal variations in physical performance. *Perceptual and Motor Skills, 63*, 835-838.
- Jacobs, B. S., & Moss, H. A. (1976). Birth-order and sex of sibling as determinants of mother-infant interaction. *Child Development, 47*, 315-322.
- Jacobson, J. W., Mulick, J. A., & Schwartz, A. A. (1995). A history of facilitated communication: science, pseudoscience, and antiscience: Science working group on facilitated communication. *American Psychologist, 50*, 750-765.
- Koocher, G. P. (1977). Bathroom behavior and human dignity. *Journal of Personality and Social Psychology, 35*, 120-121. (at end of Middlemist et al article)
- Linder, D., & Hynan, M. T. (1987). Perceived structure of abstract paintings as a function of structure of music listened to on initial viewing. *Bulletin of the Psychonomics Society, 25*, 44-46.
- Meeks, B. S., Hendrick, S. S., & Hendrick, C. (1998). Communication, love and relationship satisfaction. *Journal of Social and Personal Relationships, 15*, 755-773.
- Middlemist, R. D., Knowles, E. S., & Matter, C. F. (1976). Personal space invasion in the lavatory: Suggestive evidence for arousal. *Journal of Personality and Social Psychology, 33*, 541-546.
- Platt, J. R. (1964). Strong inference. *Science, 146*, 347-353.
- Ramachandran, V. S. & Blakeslee, S. (1998). Chapter 1: The phantom within. From *Phantoms in the Brain: Probing the mysteries of the human mind* New York: William Morrow.
- Rosenhan, D. L. (1973). On being sane in insane places. *Science, 179*, 250-258.
- Smith, D. (2003). Five principles for research ethics. *Monitor on Psychology, 34* (1), 56-60.
- Stanovich, K. E. (2001). Chapter 1: Psychology is alive and well (and doing well among the science). In *How to think straight about psychology*. New York: Longman Press.
- Stanovich, K. E. (2001). Chapter 2: Falsifiability: A discourse on how to foil little green men in the head. In *How to think straight about psychology*. New York: Longman Press.
- Sullivan, G. L. & O'Connor, P. J. (1988). Women's role portrayals in magazine advertising: 1958:1983. *Sex Roles, 18*, 181-188.