

Psychology 192: Introduction to Research Methods, Fall 2007

Mondays and Wednesdays, 2:40 – 4 pm, Bass 203

Course Instructor

Michael J. Stroud

Office Location: Bass 416

Office Number: 585 – 3918

Email: mstroud@email.smith.edu

Office Hours: Monday and Wednesday 4 – 5:00 pm
or by appointment

“SOMEWHERE, SOMETHING
INCREDIBLE IS
WAITING TO BE KNOWN.”
~CARL SAGAN

Teaching Assistant

Irina Pekareva-Kochergina

Email: ikocherg@email.smith.edu

Available by appointment

Course Structure

This course will introduce you to a variety of methods used in psychological research. We will cover the basic methodological techniques of cognitive psychology such as observational, experimental, and survey methods. The course is focused on techniques common to cognitive psychological research. We will cover a broad range of topics including, but not limited to attention, memory, intelligence, and language. We will address traditional theoretical perspectives, but in the context of existing data.

Required Textbooks (available from College Bookstore in the Campus Center)

Stanovich, K. (2006) *How To Think Straight About Psychology (8th Ed.)* Boston, MA: Allyn & Bacon

Morgan, S, Harrison, T & Reichert, T (2001), *From Numbers to Words: Reporting Statistical Results for the Social Sciences*. Boston, MA: Allyn & Bacon

Martin, D. (2008), *Doing Psychology Experiments (7th Ed.)* Belmont, CA: Thomson Wadsworth

Additional readings, lecture notes and class assignments will be available on Moodle or handed out in class.

Recommended Textbook:

Publication Manual of the American Psychological Association (5th Edition).

Perrin, R. (2007). *Pocket guide to APA style*. Boston, MA: Houghton Mifflin. (Important if you are interested in graduate work in psychology).

Strunk, W. & White, E. B. (1999), *The Elements of Style*. Boston, MA: Longman.

Course Requirements

The course is in lecture/discussion format. You are expected to **complete the required readings before class**.

What this class is NOT:

A Statistics course – Although statistics are a large part of conducting research in psychology, the emphasis of this course is research methodology. If you have not taken statistics or have a profound fear of statistics, please come meet with me early. We will cover analysis and data manipulation, but it is assumed that you have a basic understanding of the theory behind inferential statistics.

A computer course – You are required to have a working knowledge of Microsoft Word and Excel. We will be conducting analyses with SPSS, however, I will teach you how to use this program. If you aren't familiar with Word or Excel, consider picking up a guide or coming to talk to me.

Course Goals

There are two major goals of this course: the first is to expose students to the wide variety of research methodologies used to explore psychological phenomena. Research strategies employing survey, and experimental designs are given the most attention. The second major goal of the course is to teach students how to write research reports according to American Psychological Association (APA) style. We will, of course, focus on the technical aspects of the writing, but also on the formation of coherent research hypotheses developed from a careful reading of previous psychological work on our topics. This is a hands-on course—students will design studies, collect data, and conduct statistical analyses using computers. Throughout the course we will consider how research ethics, worldviews, and the philosophy of science influence psychological research.

Class Participation

Much of the success of this course depends on inquiry and discussion that is forthcoming from the class. You will be graded for your participation. Participation includes attending regularly, paying attention, and contributing to discussion where appropriate. Bring caffeine if necessary!!!!

Exam

There is one exam consisting mostly of short-answer and essay questions, although some multiple choice or fill-in questions may be included. Makeup exams will be considered only under rare occasions, notification of which must occur **before** the date of the exam. Makeup exams must be taken within a week of the original test date.

Research Reports

You will be required to compose three research reports throughout the course of the semester. Each report will focus on a different topic. More will be discussed later.

Research Report 1: Memory

Research Report 2: Attention

Research Proposal: Design your own project

Poster Workshop

One important aspect of psychological research is presenting results at conferences. One of the most common forms of presentation is through posters. Posters are designed to allow researchers to present cutting edge research without having to go through the exhaustive peer review process that is required to publish in journals.

Presentation

Students will deliver a powerpoint presentation at the end of the semester of their own experimental proposal. More will be explained later in the semester.

Points Distribution

Research Report 1	15
Research Report 2	20
Research Proposal	15
Poster	10
Exam	15
Presentation	10
Quizzes/Participation	15
Total	100

Grade Equivalents

A 100.0–93.0; A- 90.0–92.9; B+ 87.0–89.9; B 83–86.9; B- 80.0–82.9; C+ 77.0–79.9; C 73.0–76.9; C- 70.0–72.9; D+ 67.0–69.9; D 63.0–66.9; D- 60.0–62.9; F below 60.0

Important Dates

M 10/22	Research Report 1
M 11/12	Research Report 2
W 12/28	Research Proposal
M 10/29	Exam 1
W 11/28	Exam 2

Additional Issues and Expectations:

- **Students with documented disabilities** who need special arrangements in this course should speak to me immediately.
- **Class participation is expected.** I strive for an informal, interactive class environment in which questions and discussion are routine, and hope to have enjoyable and stimulating discussions. The flip side of this is that you need to take responsibility for participation. I expect you to be ready to discuss, ask questions, and to look alert (bring caffeine if necessary!)
- **Any written assignments must be typed and double-spaced.** They should be checked for correct spelling, grammar and punctuation.
- **Internet access and an email account are required.** I will communicate with you via email, and we expect that you will check it routinely, at least every day or two. There are public computer terminals available in the libraries.
- **Please bring extra paper** to each class for in-class assignments.
- **Data Archive.** It is essential that you have a means of backing up your data. The best way is through a USB flash drive which can be purchased from Staples, the bookstore or anywhere on the internet. **ALWAYS BACK UP YOUR DATA IN TWO PLACES!!!!**

Outline of Topics		
Date	Topic	Reading
M 9/10	Welcome fellow researchers!!!!	Martin: Ch.1
W 9/12	History of Cognitive Psych/Research Methods in Cognitive Psychology	Stanovich: Ch. 1 Martin: Ch. 2
M 9/17	The Experimental Method	Martin: Ch. 4 Stanovich: Ch. 2
W 9/19	Research Ethics	Martin: Ch. 5
M 9/24	Research Ethics/IRB	Stanovich Ch. 6
W 9/26	Introduction to SuperLab/ Lexical Decision Task	Martin: Ch. 3
M 10/1	Mountain Day	
W 10/3	Developing an Idea Memory Assignment Posted to Moodle (10/4)	Martin: Ch. 6
M 10/8	No Class Autumn Recess	
W 10/10	Library Workshop	Martin: p. 268 – 279 (stop at Results) Stanovich: Ch. 3
M 10/15	Introduction to APA style	
W 10/17	Data Reduction/Descriptive Statistics Bring Lexical Decision Data	Martin: Ch. 11
M 10/22	Memory Experiment/Collect Data	Morgan et al., Ch. 1 – 3
W 10/24	Memory Experiment Data Reduction and Analysis Bring Memory Experiment Data	Martin: Ch. 7 Morgan et al., Ch. 8
M 10/29	Attention Experiment **Research Report 1 Due**	Stanovich: Ch. 4
W 10/31	Attention Experiment/finish program/pilot data	
M 11/5	Attention Experiment/collect data	Martin: Ch. 12 & p. 279 – 299
W 11/7	Data Analysis and Interpretation	Morgan et al., Ch. 7 Stanovich: Ch. 7
M 11/12	Attention Experiment Data Reduction and Analysis Bring Attention Data	

W 11/14	Exam	
M 11/19	Poster Workshop **First Draft of Research Report Due**	Martin: p. 304 – 306
W 11/21	No Class Thanksgiving	
M 11/26	Peer Review Workshop	Martin: Ch. 9 Stanovich: Ch. 5
W 11/28	Non - Experimental Designs **Research Report 2 Due**	
M 12/3	Work on final project/presentation	Martin: Ch. 10 Stanovich: Ch. 9
W 12/5	Experimental Designs	Martin: p. 300 – 303 Stanovich: Ch. 10
M 12/10	Presentations	Stanovich: Ch. 12
W 12/12	Presentations **Final Research Proposal Due**	
*This syllabus is a guide for how the course will go but is subject to change.		