



Psych 200: Research Methods I

Fall 2005

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Please don't call before 8:00AM or after 11:00PM.

Office hours: Monday and Wednesday 12-1 and by appointment. Or please drop by or drop me a note if you have a question or want to talk about the class. E-mail is always the best way to get ahold of me.

Lab Instructor: Peter Naegele, Ph.D.
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Office hours: Tuesday and Thursday, 10:30-12.

Meeting times: Monday/Wednesday/Friday 11-11:50
Labs: Either Tuesday 3-3:50 or Wednesday 1:30-2:20

Required Texts: **ADD**

Goals:

This course will probably be different than other psychology courses you have taken in that, rather than spending your time learning about what other psychologists have discovered, you will be learning to **become** a psychologist. Psych 200 is designed to help you develop the basic skills you need to continue your study of psychology: reading the primary psychological literature, evaluating the results of psychological studies, carrying out psychological research, using statistics to analyze data, and presenting your research findings to interested colleagues.

This course is probably also different from other psychology courses you have taken in that it has three major components. In the first part of the course, you will be spending a lot of time reading about different ways of carrying out research, and even more time trying to apply what you've learned to specific situations, carrying out psychological studies, analyzing the results of your studies to see what you've learned, and presenting the results of your work both to the class and in written form. The centerpiece of this component of the course is a small research project you will

carry out with a small group of peers.

The second component of this course will focus on giving you a foundation for your study of statistics. This component of the course will focus on learning basic concepts in probability and include study of normal distributions, t-tests, one-way ANOVA, correlation, simple regression, and chi-square. Although based in mathematics, our study of statistics will not focus on the details of statistical calculation. It is my hope that when you finish this semester you will have a basic understanding of a) the underlying logic of statistical analyses and of each specific test we will study, b) how characteristics of the data to be analyzed contribute to the results and interpretation of statistical analyses, c) when to apply each test. The centerpiece of the statistical component of the course will be a secondary data analysis of a large dataset.

The third component of this course is the lab, run by Dr. Naegele. During lab, you will learn how to use SPSS to describe and analyze data. Lab will revolve around two types of activities: basic exercises designed to provide you with the skills you need to use SPSS and the analysis of data for the two projects you will complete for the course.

Course Requirements:

It is your responsibility to attend all classes and learn material presented during lectures, class discussions, and outside assignments. You are responsible for keeping yourself informed of any changes that are announced in class regarding assignments and changes in schedule. Because much of class time will involve discussion of outside readings, it is *imperative* that you keep up with the reading and come prepared for class. The better prepared you are, the more you can contribute to all of our learning experiences. Reading and homework assignments should be completed before class on the dates indicated on the syllabus.

In addition, you should be prepared to participate in group projects and to contribute to making the student groups to which you are assigned work together effectively. Working with a group can be a little like dating - you can have a positive experience where you get a lot of support and learn a lot or you can feel cheated, used, angry, and manipulated. If you have concerns about how your group is functioning or how work is divided ASK FOR HELP! It is your responsibility to come talk to me early enough that we can help things back on track.

Expectations for Independent Work

Psych 204 is designed as a lab course. Most of your time during class will be spent discussing assignments you have done outside of class, clarifying concepts you find confusing, providing additional examples to help you better understand the concepts presented in your textbook, and working on your research projects. *The success of this course will very much depend on how well*

you prepare outside of class. The more you put into the class, the more you will get out of it.

Evaluation

There are three major criteria on which you will be evaluated: your performance on Readiness Assessment Tests (RATS), your homework portfolio, and the research projects.

Readiness Assessment Tests. Readiness Assessment Tests are short quizzes (around 20 multiple choice and true/false questions). There will be six RATs during the course of the semester. Their purpose is to save time reviewing material you were assigned to read outside of class and to ensure that everyone has the basics of the material down before we elaborate on that material during class. There are THREE parts to each RAT.

First, you will take the RAT individually. This is a closed-book quiz.

Second, you will take the same RAT with an assigned group of three other students. The group will turn in the group RAT for grading. This is also a closed-book quiz.

Third, after receiving your graded group RAT, your group will have 5 minutes to write an appeal to any question that was marked wrong on the group RAT. Your appeal must be based on a defense of the correctness of your answer. If your appeal is accepted, your grade (both individual and group) will be changed accordingly. The appeal is done open-book. There are no appeals on individual RATS.

Both the individual and group RAT will count toward your final grade. If your group grade is LOWER than your individual grade at the end of the semester, you will receive the higher of the two (in other words, your group can't drag you down, but they will probably help you up).

On the day of each RAT, please be sure to bring in your book, a blue or black pen to take your RAT, and a red pen or pencil to correct it

Homework portfolio. The goal of the RATs is to make sure you have a basic understanding of the material you have read in your textbook. But reading is not the same as knowing how to apply something. Learning to read, critique, and do research is like learning to write, kayak, or play an instrument. I can provide you with guidance and design activities that will give you the opportunity to train yourself. I can give you feedback on how well you are doing and suggest ways to improve. But these skills can only be mastered through practice, repetition, and refinement. It is something you have to do for yourself. That's what the homework is for.

Homework will be assigned frequently during the semester. Due dates will be indicated on

assignment sheets. **On the due date**, you are expected to come to class ready to discuss the assignment with your answers clearly written or outlined. Your ability to participate in class will depend on your having completed the assignment, and assignment completion will be recorded on the due date. You should collect all your homework in a **homework portfolio**. I strongly suggest a well-organized notebook - 3 hole if you are going to type, spiral bound if you want to write by hand. Note that NEATNESS AND ORGANIZATION COUNT! When you are doing your own research, or taking on a large project like a major paper or a senior project, it is absolutely critical to organize and document your work. After our discussion of an assignment, you may want to revise your original answers before putting them in the portfolio. The homework portfolio will be collected periodically throughout the semester. Each individual assignment will be graded on a 3 point scale and a total for the semester computed.

Research Projects. Every student in the class will do two complete research projects and present the results in a poster format. Like most research projects in the sciences, you will work as part of a team to collect data for these projects.

Why a group? Many students don't like working on group projects. So why am I making you work together? The reason that you are working with a group is that there is simply too much to be done for you to be able to do it all yourself. For example, in the first six weeks of the class, each group will organize a small study, collect data, input it into the computer, develop and test questions and hypotheses, test the hypotheses, and present the results to the class as a poster. It is not a job that one person can do alone in a one-semester, four credit class.

What about people who never show up for meetings and never do any work? Two big complaints that students have about working on group projects is that it is hard to meet outside of class and that some students do all the work and others don't do any. This is especially annoying when a group grade is assigned.

Although you are working with a group and you will be coordinating your research with others in a group, this is primarily an INDIVIDUAL project. You will write and be graded on an individual research poster. Your final analyses will draw on the work of others in your group, but your work will be written and graded individually. Your group will be given ample time in class and during lab to work on the project. Attendance is mandatory specifically to encourage everyone to be there for group meetings. I don't foresee that you will need to meet as a group outside of this time unless you choose to do so. Homework assignments and drafts are also designed to encourage everyone to be prepared and contribute to the group.

Do slackers get the same grades as everyone else? Let's assume that, despite all the things we've done to make it easy to work together as a group, someone slacks off, doesn't pull their weight, and doesn't contribute. Is there anything that can be done? YES. Every few weeks, we will be doing peer evaluations where every person's contribution to the group is rated. If there is a

consensus within a group that someone is not doing their share of the work, that person will be given four choices. (1) They can start pulling their own weight and continue to participate in the group. They will have one week to clean up their act and must be accepted back into the group by the other members. (2) They can continue to slack off and agree to take 50% of whatever the group grade is. (3) They can choose to work on their own. (4) They can ask to be reassigned to another group. They will be reassigned only with my permission and the permission of all members of the other group. Please note that you will be evaluated by your peers BOTH on your contribution to the RAT process and to your contribution to the Research Project.

What are we graded on? The Research Project has two products: a poster presentation and a critique. Each will be discussed in detail as we get closer to that point.

Extra Help:

This course is going to be challenging and requires you to do a lot of independent work. If you have questions, if you feel frustrated or confused, or if you just want to talk about the class, PLEASE COME SEE ME! I am around most of the time, and you can always set up an appointment with me after class or by e-mail. There is excellent support available from the Student Support office for both writing and quantitative skills. Use it!

I STRONGLY, STRONGLY, STRONGLY encourage you to work on your homework and papers with other people in the class. Working together will both make it more fun and help you understand the material better.

Absences, late papers, missed presentations, and regrades:

Because it is extremely difficult to evaluate the validity of excuses for missing a class or a deadline, the general policy will be to accept late assignments only for confirmed emergencies or an illness that requires confinement to the Health Center. Please notify me as soon as it is apparent that you will miss a class or a deadline. Failure to notify me promptly may result in refusal to accept late work, with a resultant 0 averaged into the final grade. Because the attendance policy already allows for 5 unexcused absences, no additional excuses are allowed. If you have a long-term illness that precludes your attendance, please talk to me.

Due dates are noted on the syllabus and in handouts throughout the semester. Please make your plans so you can be in class or turn in your work on those days.

ALL WRITTEN ASSIGNMENTS ARE DUE BY THE BEGINNING OF CLASS ON THE DAY INDICATED ON THE SYLLABUS. Long lines at the printer are not a legitimate excuse for a late paper, so plan your time accordingly. I expect you to turn in all written assignments on time. It is unfair to classmates who push themselves to complete their work by the due date for you to turn

your work in late. *Everyone* could do a better job given a little more time. All late assignments will be dropped 10 points the first day and will not be accepted more than two days late. If you know your assignment will be late, you are responsible for informing me on or before the date it is due. Failure to do so may result in refusal to accept late work.

Attendance in the class is mandatory. I know that there may be legitimate reasons to miss an occasional class. I also recognize that, as adults, you are responsible for making your own decisions about the learning process. However, this policy was put in place at the suggestion of students I have had in the past specifically because in this class you are not acting solely as an individual learner, but are also contributing to the learning of your entire group. Thus it is more similar to a job, where your absence affects others, than a traditional classroom, where it affects only yourself. You are allowed five unexcused absences without penalty - only one of which can be on a lab date that the class meets. After that, your final grade will drop 3 points for each additional absence.

A note on academic integrity:

One important skill that you need to develop is the ability to distinguish between your own ideas and those of other people. Although most obvious in cases where text is copied word for word, plagiarism also includes copying ideas or arguments from one source and presenting them as your own. Plagiarism can involve as little as copying a key phrase or sentence without acknowledging the source. It is easy to avoid. Use quotation marks to indicate direct quotes. If you are presenting an idea or an argument that you heard or read someplace else, give the person who first developed the idea credit for it. Remember, when in doubt, cite.

Cheating and plagiarism are very serious offenses governed by the Bard student code of conduct. Anyone found purposely miscorrecting a RAT or copying work from another source without proper acknowledgment will receive an F in this class and will be referred to the College Judicial System for further action.

Any violation of ethical standards for the treatment of human research participants or any violation of the APA ethics code will result in an F for the class and will be discussed during your psychology moderation board.

CLASS SCHEDULE

**Overview of the Research Process: Learning by Doing
Weeks 1-7**

There are two sections of this unit: An overview of the research process and an introduction and review of research pragmatics.

- Goals:**
- 1) Familiarize yourself with the basic characteristics of empirical studies and the research strategies used by behavioral scientists
 - 2) Give you a hands-on appreciation of the complexities of the research process
 - 3) Learn basic methods of data entry and coding
 - 4) Learn/review basic statistics and use of SPSS. You should feel comfortable calculating and interpreting means, t-tests, ANOVA's, χ^2 , and correlations using SPSS.

Projects: Working from a general outline, you will carry out a complete research project from the collection of pilot data, to the revision of the research protocol, to statistical analysis and presentation.

Due Dates: Jan 31 RAT 1: R&R Chapters 1 & 2
Feb 7 RAT 2: R&R Chapters 4 & 5
Mar 7 Poster presentation
Mar 14 Critique of research project

Measurement, Observation, and Surveys: It's All in the Details Weeks 8-16

The difference between a decent study and an excellent one is in the hundreds of small and large decisions researchers make in designing the study and in the care with which they carry it out. This unit will add depth to your understanding of your theoretical and pragmatic knowledge of research ethics, measurement, and research technique.

- Goals:**
- 1) Understand the key elements of professional research ethics
 - 2) Introduce key concepts in measurement and sampling
 - 3) Understand the advantages, disadvantages, and appropriate use of experimental, quasi-experimental, and survey research strategies
 - 4) Learn to use the primary bibliographic sources in psychology
 - 4) Learn/review the key elements of reading, and critiquing scientific papers
 - 5) Provide greater depth in your understanding of specific research techniques

Projects: You will be introduced to a research question and approach in cognitive science, psychopathology, social psychology, or developmental science. Working from this starting point, you will develop a research question and carry out a complete research project.

- Due Dates:**
- Mar 15 Complete training in the ethics of research involving human research participants and turn in certificate of completion
 - Mar 19 Moderation Saturday for students planning to moderate in Psych
 - Mar 22 RAT 3 Measurement RR Chapter 6
 - Mar 25 Moderation papers due to registrar
 - Apr 6 RAT 4 Experiments (note: this is the day after break) RR Chapter 7
 - Apr 19 RAT 5 Quasi-experimental research RR Chapter 8
 - May 2 RAT 6 Survey research RR Chapter 9
 - May 11 Poster presentation
 - May 16 Critique of research project