

PSYCHOLOGY 209: Fundamentals of Psychological Research

Winter 2012



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“...it is curiosity, initiative, originality, and the ruthless application of honesty that count in research- much more than feats of logic and memory alone.”

- Sir Julian Sorrell Huxley, British biologist and author

“If we knew what we were doing, it wouldn't be called research, would it?”

- Albert Einstein

Required Texts:

- Cozby, P. C. (2007/2009). *Methods in Behavioral Research, 9th or 10th Ed.* New York: McGraw Hill.
- Sayre, G. and Grinley, M. (2011). *Finding Meaning in the Method.* Pearson.
- PSY 209 Course Reader (available at Prestige Copy and Print, 11023 8th Ave NE # B- near the Starbucks, behind Greenlake Jewelers on Northgate Way)

Optional Text:

- *Publication Manual of the American Psychological Association (6th Ed.)* (2009). Washington, D.C.: the American Psychological Association.

Other Supplies needed:

A NetID login. Your NetID will provide login and password access to computers in the computer labs and 100MB of disk storage space (which you'll need for your project). Once you have paid your winter tuition and fees, you can create your NetID account at <https://netid.northseattle.edu/>

COURSE DESCRIPTION AND GOALS

This course provides an introduction to methods in psychological research. This includes the examination of the scientific method, hypothesis testing, and designs of qualitative and quantitative research. Other topics include the search and evaluation of research literature in psychology, descriptive statistical analysis, fundamentals of scientific writing, ethical issues and cross-cultural considerations in psychological research. This course culminates in a research study created, conducted, analyzed and presented by students.

Welcome to Fundamentals of Psychological Research! This is a research methods course in which you will be learning how research is done by doing it yourself. You will be learning about the scientific method and psychological research by devising your own original research project. This course requires a great deal of energy and commitment, but provides rewards in the form of learning and (hopefully) fun! My hope is that at the end of the course we will have:

- Appreciation of the rigor applied to scientific research.
- Understanding of ethical research in use of both human participants and animal subjects.
- Gained a sense of community in creating scientific inquiry in a small group setting.
- Understanding of the difference between scientific thinking and other types of thinking.
- The ability to compare strengths and weaknesses of different research methods.
- The ability to search databases for psychological literature.
- Understanding how to summarize and critically examine a psychological journal article.
- The ability to identify components of a research project.
- The experience of collecting and analyzing research data to draw accurate conclusions.
- The knowledge of how to cite sources in APA format.
- The experience of presenting research findings in a scientific lab report and presentation.

Course Content and Format: Classes will consist of a combination of lecture, discussions, and hands-on activities. Because we only meet three days a week, and because so much of the course will involve active learning, it is extremely important that you attend class consistently. You are expected to have done the readings **before** the class they are required for, so that you may be an active participant in class discussion and activities. Some material covered in the textbook will be covered in lecture, since there are certain concepts, terms, and theories that are central to understanding research methods. However, the amount of overlap between class material and the textbook will vary depending on the topic.

Expectations of students:

- Come to every class prepared (having completed assigned reading and assignments) and on time.
- Participate in the class community, including sharing of perspectives, asking questions, and contributing to group discussions and activities.
- Share the workload with your research group.

GRADING

Critical Thinking Assignment: An important learning outcome in this course is critical thinking. You'll be asked to examine a media source article and apply critical thinking skills in evaluating it.

Article Summary: One of the goals of this course is that you learn to read and understand peer-reviewed research articles. You will be asked to summarize a research article, showing understanding of the underlying reasons for the study, the methods, results, and implications.

Research Project: You and up to three other class members will design a study, collect the data, and present the results. You must work in a group for this project. Each **group** will submit a proposal, a human subjects review application, drafts of your methods and results, and present findings to the class. Each **individual person** will submit a draft of their introduction as well as their own final paper. In the first few weeks of class, we will brainstorm ideas, propose them, and begin library research. Over the course of the quarter you will solidify your ideas into a simple, methodologically sound research study. Your group will collect data, analyze it, and present results at the end of the quarter in either an APA poster or oral presentation. The project grade will break down into points as follows:

Proposal and references: 10 points

Human Subjects Review Application: 15 points

Draft of introduction: 15 points
Draft of methods: 10 points
Draft of results: 10 points
Poster/Presentation: 25 points
Final individual paper: 40 points
Total Points Possible = 125 points

A Note about Working in Groups

For your research project, you will be working with others and your ability and willingness to do so will strongly influence your participation grade (and your research project!). Group work is not something we may be familiar with in this individualistic culture, yet it is extremely relevant to most work you will do in your future career. Working with your group may or may not come easily. You may have times when you will not agree. You may have a battle of wills. You may struggle with sharing a workload. However, because this group work is required, now is the time to understand your personal style (are you a controlling person? a social loafer?), appreciate the styles of others, and work to find a common ground so that all members contribute equally to your project. I expect you, as adults, to be able to work out any differences you may encounter. If all else fails, talk to me and we will solve any major problems together.

Quizzes: A small (but important) part of your grade for this course will be based on short quizzes. Four quizzes will be given worth 15 points each, and you will be allowed to drop one of those (meaning your lowest score, or if you happen to miss one). There will be NO makeup quizzes. The quizzes will be based on the readings, and will contain questions that are located at the end of your book chapters. A guide listing potential questions is available on our class blog to direct your studies.

Participation: Due to the hands-on nature of the class and the fact that we only meet three times a week, class participation is an important aspect of the learning process and is part of your grade. This includes coming to class every day on time, paying attention in class, participating in class activities and discussions, and keeping up with the readings and assignments. Participation will be assessed by you, me, AND by your group members. If you must miss class, please notify me by phone or email that you will be absent.

Final Grade Assessment: To assess performance in this course, I will be utilizing a point system:

Critical Thinking Assignment = 10 points

Article Summary = 20 points

Research Project = 125 points

Quizzes (4 @ 15 pts, drop 1) = 45 points

Participation = 30 points

Total Points Possible = 230

Your final grade will be calculated from the total points on your written assignments, presentation, quiz scores and participation grade. Your grade will be determined as follows:

$$\text{Percentage} = (\text{Total Points} / 230) * 100$$

$$\text{Numeric Grade} = (\text{Percentage} - 55) / 10$$

For example, a total of 184 points would result in a percentage of: $(184/230) * 100 = 80$

The numeric grade, reported to the registrar, would be: $(80 - 55) / 10 = 2.5$

This scale results in a 95% = 4.0, with a 0.1 decrease for every percentage point below 95.

You are responsible for keeping track of how you are doing in the course. I recommend you keep a running total of your points as the quarter progresses.

COURSE POLICIES

Late Policy: Because there are many written assignments and each one builds upon the one before, it is imperative you keep up with them. Any assignment turned in **later than the beginning of class** on the due date will be marked down by 10%, and then another 20% for every day it is late (including non-class days). **There will be no exceptions to this policy, so please do not ask.**

Plagiarism and Cheating: The Seattle Community College District takes its Academic Honesty Code very seriously and so do I. If you are working in a group, it is very possible that the Abstract, Methods and Results sections of your papers will be similar, but it is important that in your final paper (particularly the Introduction and Discussion) the words you use should be your own. I am especially concerned about plagiarism of your referenced sources. Always use quotations when using the words found in a source and cite all ideas that are not your own. If a student is found to be plagiarizing, that is, using other's work without proper citation in an assignment, a zero will be given and further disciplinary action may be taken (per Washington Administrative Code 132F-121-120). A handout on what constitutes plagiarism is in your reader.

Cell Phones (and Ipods, laptops, other electronic devices, etc).....should be **turned off** (even 'vibrate' mode is distracting) before class begins, and should not be turned on again until class ends. Please be courteous to your fellow students by making sure that anything that might 'go off' or make noise is turned off so that there are no disruptions.

RESOURCES

This is a course that covers a lot of material and requires a lot of independent study. If you need assistance, you have the following resources at your disposal:

Class Blog: There is a blog for this course. The URL is <http://grinley209.blogspot.com> The blog contains this syllabus, which you can download if you lose this copy. Also, I will post any PowerPoint slides presented in class lectures that you may download before class to cut down on note-writing time. The site also contains links to important websites you might need to access (e.g. the Library, the Loft) and current headlines in psychology news. I will periodically post supplementary material that may be of interest to you, such as news articles or links to websites connected with topics discussed in class. You have the opportunity to respond to any post I make, and I hope you feel free to add comments or thoughts.

Counseling Center: Located in the College Center Room 2346A (2nd floor, north end of the College Center), 527-3676. The Counseling Center provides an array of free academic support services, including consultations on study skills, test taking, and concentration issues. They also are available to help students with career counseling, stress management, and offer support for both academic and personal issues. Their website: <http://www.northseattle.edu/services/counseling/>

The Loft Writing Center: Located in the top floor of the Library, if you need assistance with your writing, they can help. There is quite a bit of writing required for this course, and if you need assistance, this is a wonderful service available to students. They offer free one-on-one help with everything from ESL issues to brainstorming and revising term papers. They also have a nice website that has some handouts on writing: <https://northseattle.edu/tutoring/loft-writing-center> Click on "Online Resources". Another good website is the UW Psychology Writing Center: <http://web.psych.washington.edu/writingcenter/>

Disability Services: Located in College Center Room 2346A, 527-3697, <http://www.northseattle.edu/services/disability/> DS provides services and assistance to students with permanent or temporary physical, mental, learning, or sensory disabilities. The American Disabilities Act

is designed to ensure that students with disabilities have an equal opportunity to access academic programs and successfully complete their studies. Any student with special needs must bring documentation to Disability Services before any academic adjustments will be made. Any contacts and/or information will remain strictly confidential. If you have a documented disability, register with DS, and speak to me as soon as possible about any course adaptations or accommodations you might need, or if you have emergency medical information or special arrangements in case of an evacuation so that I can be aware of your needs.

ME: Obvious but often overlooked! I have office hours, please do not hesitate to use them. If you cannot meet during the times listed at the top of the syllabus, please send me an email and we can arrange a time to meet. I am here for you, please don't hesitate to let me know if you are having trouble with the class, with your project, with understanding concepts, or none or all of the above. If you get through the first week or two of class and are worried about your understanding of the class, please come to me and we can work on areas that need improvement. Don't wait until the end of the quarter to sort out grade issues or try to make it up...it will be too late.

TENTATIVE SCHEDULE

NOTE: CR = Course Reader. Please have all readings completed by the day they are listed.

LAB: means on this day we will be meeting in the computer lab (Room TBA) unless otherwise noted.

| <i>Week</i> | Monday | Wednesday | Friday |
|-------------|---|---|--|
| 1 | | 1/4 Introduction to the course Scientific method | 1/6 Scientific Understanding <u>Reading:</u> Cozby Ch. 1, CR 1-2 |
| 2 | 1/9 The Research Process <u>Reading:</u> Cozby Ch. 2, CR 3-4 | 1/11 Library visit Critical Thinking Due | 1/13 Overview of Methods, Group sign up <u>Reading:</u> Cozby Ch. 4, CR 5-7 |
| 3 | 1/16 MARTIN LUTHER KING JR. DAY: NO CLASSES | 1/18 Qualitative Methods <u>Reading:</u> Cozby Ch. 6, CR 8-9 Rough Draft Article Summary | 1/20 **Quiz #1: Chapters 1, 2, 4, 6** <u>Reading:</u> Sayre and Grinley |
| 4 | 1/23 Measurement <u>Reading:</u> Cozby Ch. 5 Article Summary Due | 1/25 Surveys <u>Reading:</u> Cozby Ch. 7 | 1/27 Discuss projects Proposal and References Due |
| 5 | 1/30 Ethics in Research <u>Reading:</u> Cozby Ch. 3, CR 10 | 2/1 **Quiz #2: Chapters 5, 7, 3** Rough Draft Human Subjects Application due | 2/3 Experimental Design <u>Reading:</u> Cozby Ch. 8 Human Subjects App. due |
| 6 | 2/6 Experiments (cont.) <u>Reading:</u> Cozby Ch. 9, CR 11 | 2/8 Complex Designs <u>Reading:</u> Cozby Ch. 10 | 2/10 Introduction Draft due |
| 7 | 2/13 Other research designs <u>Reading:</u> Cozby Ch. 11 | 2/15 Methods draft due Bring 10 copies of test materials | 2/17 LAB **Quiz #3: Chapters 8-11** Preparing for Data Collection-Excel Tutorial |
| 8 | 2/20 PRESIDENT'S DAY: NO CLASSES | 2/22 Descriptive Statistics <u>Reading:</u> Cozby Ch. 12, CR 12 | 2/24 LAB Data Analysis in Excel <u>Reading:</u> Cozby Ch. 13 |
| 9 | 2/27 DATA COLLECTION DAY | 2/29 LAB | 3/2 LAB Discuss Results <u>Reading:</u> CR 13 |
| 10 | 3/5 APA format <u>Reading:</u> Cozby Appendix A, CR 14-16 | 3/7 Writing your Discussion <u>Reading:</u> Cozby Ch. 14 Results Draft Due | 3/9 LAB **Quiz #4: Chapters 12, 13, 14** APA Presentations/Posters <u>Reading:</u> CR 19 |
| 11 | 3/12 Rough Draft of Discussion due | 3/14 LAB | 3/16 LAB Final Individual Paper due |
| 12 | 3/19 1:00 – 3:00 PM Research Symposium in North Star Dining Room Posters/Presentations due | | |