

Syllabus

Course Goal:

The PSY 514 course is designed to give you an advanced introduction, is that an oxymoron (?), to research design. I have selected a text that is considered a standard in the field to provide an overview of research design at the next level. I want you to understand WHY a particular design offers advantages, not merely WHEN that design applies. In addition, I will show you how statistics derive from design, not the other way around as is commonly misunderstood. Finally, the products that are required are intended to take you to the proposal stage of a Master's Thesis, though the methods apply to planning any research.

Text:

Rosenthal, R. & Rosnow, R. L. (1991) *Essentials of behavioral research: Methods and data*, 2nd, New York: McGraw-Hill. (Please try to find a **used** copy, a new edition is about to be published, but is not available yet.)

Course Requirements:

1. *Select a topic for your research.* Some of you are starting from scratch, while others are well along in developing an idea. For those of you still searching, this is a chance to begin the limiting process. For this assignment, I want you to write a short 2-3 page summary of the topic as you understand it today.
2. *Identify two articles that use different methods to address the topic you have chosen.* The point here is for you begin to explore the range of methods that have been used to investigate your topic. The more different the methods, the better!
3. *Begin an annotated bibliography.* One of the more important research tools is to be able write an accurate summary of an article so that you do not have to return to the original text in order to know when an article applies.

4. *Write a short summary of the project* . The goal here is to organize your thoughts and plans and to use that as the basis for getting your committee together on the concept you have in mind.
5. *Develop a research plan for your thesis*. Here you will develop the definitions of variables, the design of the project, the predicted outcomes, and the method for assessment.
6. *Write a formal proposal for your thesis*. This is a paper that should include a comprehensive review of the literature, the development of the logic of your study, the predictions you will make and how you will test them, and the basic strategy for data analysis. This means that you will have a paper the includes Introduction, Methods, and the beginning of Results, as well as References.

Probable Reading Assignments:

Week 1 (Chapters 1 & 2) : Developing a preliminary research idea

Week 2 (Chapters 3, 4 and 5) : Basic issues in the design of research

Week 3 (Chapters 6 and first presentations of idea) : So what is your idea?

Week 4 (Chapters 7 and 8) : Collecting data

Week 5 (Chapters 9 and 10) : How and from whom?

Week 6 (Chapter 11 and 12) : Ethical concerns

Week 7 (Chapters 13, 14 & 15) : What are statistics and what do they mean?

Week 8 (Chapters 16 & 17) : Why is the analysis of variance so popular?

Week 9 (Chapter 18) : The value of subjects as their own controls.

Week 10 (Chapters 19 & 20) : Power - what is it good for, and not!

Week 11 (Chapters 21 & 22) Alternative ways to examine a problem.

Week 12 (Chapter 23) : Nonparametric approaches

Week 13 (Chapter 24 and presentations) : Multivariate approaches you have just learned

Week 14 (Presentations)

Finals Week (Presentations)