



CEP 955

CEP 955 Research Design and Methods for
Educational Psychology and
Educational Technology

Please note: Provided as a sample only

The following is provided to you as a sample syllabus for the course. Please note that instructors and dates are subject to change. Course contents, readings and assignments are likely to be updated and may vary. Please check with the current course catalogue <http://reg.msu.edu/> for details and contact the instructor of record should you have any questions.

Syllabus

CEP 955 Research Design and Methods for Educational Psychology and Educational Technology

MTHE 954 Design and Methods in Mathematics Education Research

Fall, 2011

Instructor

Ralph Putnam

511 Erickson Hall

email: ralphp@msu.edu

office hours by appointment (request appointment at <http://tungle.me/ralphputnam>)

Course Meets

Tuesday, 12:40pm–3:30pm

212 North Kedzie

Web Sites:

Angel: MTHE 954/CEP 955 Research Design

Course Overview

This is a course about designing research studies in education. Primary objectives are:

1. to learn general principles of research design
2. to learn about a variety of different kinds of research designs
3. to practice actually designing research
4. to support your writing of a research proposal for your research practicum or other research project that you intend to carry out.

Course Objectives

The goal of this course is simple: That all who take it become competent in the basic principles of research design. That means that all students will learn about the nature of the research design task (its individual elements and its overall shape), will think through and decide issues of design, and will carry out the research

design process to create a research proposal for work that you may actually undertake. Beginners, in the EPET program and in other doctoral programs in the College will develop a defensible Practicum (also called an “Apprenticeship”) research proposal. Students who are farther will develop a research proposal that they would defend and carry out, e.g., typically their Dissertation proposal. Though everyone’s principal course product will be their own research proposal, all students are also expected to state and help to solve design problems—both those we read about and discuss in class and those that their peers are struggling to solve. In short, we will learn research design as a community of researchers.

A central challenge addressed in any course on research design is the competition between learning about individual elements of the design process (the “sub-tasks” mentioned above) and the equally essential task of learning to put all the pieces together. The weekly readings and discussions will provide substantial direction on the first learning task (and some on the second). The proposal writing task will be the basic workspace for addressing the second learning task.

Required Texts

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches (2nd ed.)*. Thousand Oaks, CA: Sage.

There are a number of published texts on designing and carrying out educational research. In reviewing these texts for possible use in this course, I found that none seemed perfect, and all were quite expensive. I therefore decided to use the second edition of Creswell’s Research Design. The newer third edition is not different in substantial ways for our purposes, and you can buy a used copy of the second addition for less than \$20 on [Amazon](#) (in contrast to \$46 for the newer edition). **Be sure to get the second edition.** I’ll be supplementing this text with chapters from other books, which will be available as PDFs.

National Research Council. (2002). *Scientific research in education*. Washington, DC: National Academy Press.

This committee report on research in education has been important in recent conversations about what is and what is not good research in education. Download free PDF of this book from [National Academy Press](#).

Booth, W. C., Colomb, G. G., & Williams, J. M. (2008). *The craft of research (3rd ed.)*. Chicago: University of Chicago Press.

Although this book may seem directed to undergraduates, it has excellent advice and insights on the research design and writing process. You can get it on [Amazon](#) in paperback for about \$9 or \$4 in the Kindle edition (which you can read with free Kindle app for your computer).

American Psychological Association. (2009). *Publication manual of the American Psychological Association (6th ed.)*. Washington, DC: Author.

We won’t actually be using the *APA Publication Manual* in class, but I expect you to be using APA style correctly and consistently at this point in your programs and you need to own this book. Although there are numerous online sources about APA style, there is important information in the

Publication Manual that is not available elsewhere (in part because APA is very strict about not allowing their content to appear on web sites.)

Other Readings

We will be drawing on a number of other book chapters and articles, which will be available online.

Activities

Each class session will be divided into roughly three parts. In one part we will discuss the assigned readings for that day in a whole group, small groups, or some combination of these. In a second part we will listen and respond to oral presentations on memos written for that day or other presentations by students. In the third part we will have design and proposal-writing workshops where we will work on the development of your research designs and proposals. For example you might share drafts with one another, discuss problems you are encountering, and so on.

Grading

Research Proposal	50%
Research Critiques (3)	20%
Weekly assignments	15%
Participation	15%