PSYC 644
Methods for Social Research
FALL 2012

Instructor: Patrick E. McKnight, Ph.D.
Office: David King 2064/2065
Office Hours: Tues 12:30-1:30pm and by appointment
Phone: (703) 993-8292
E-mail: pmcknigh@gmu.edu
Class Location: Enterprise Hall 275
Class Date/Time: Tues 1:30pm-4:15pm
Class website: http://mres.gmu.edu/PSYC644/

Course Overview

The purpose of this course is to fully immerse graduate students into the many issues surrounding basic and applied social science research methodology. Students will read a wide spectrum of seminal articles from clinical, developmental, experimental, and social psychology that pertain to internal validity, causal generalization, and construct validity. These rudimentary areas require specific study to help students fully appreciate research design, data analysis, and manuscript preparation decisions - the core decisions that lie at the heart of psychological science.

Course Requirements and Structure

Each student will be required to read assignments, attend class, contribute to the weekly discussions and participate in four intensive reviews throughout the semester. Readings consist of seminal articles from the research methodology literature that are relevant to each week’s topic. By attending class and contributing to class discussion, students get the opportunity to understand the assigned readings and discuss the implications and limitations of each topic. Finally, the four intensive reviews - scheduled approximately every month - serve to reinforce the topics discussed to date and provide more opportunities for students to master the material. These reviews require students to review existing manuscripts from disparate fields and to write a review of the methodological approach used in the manuscript. Each manuscript will be reviewed by multiple reviewers and discussed at length after submission.

Grading

All grades will be based upon student participation in both weekly class discussions as well as in written assignments due for the four intensive reviews. Each student will submit four structured reviews. I read each one but will not provide any feedback directly to the students for several reasons. In lieu of direct student feedback, I will discuss my perspective at the end of each class review. I will ask each of you to identify what you feel as if you “missed” or what you learned as a result of the discussion. Your own critique serves as an opportunity to show me that you put forth a concerted effort to think about the material. As indicated before, I have several reasons for not providing direct feedback and I enumerate them here.

- scientific reviews are often a matter of knowledge, preference, and perspective and I do not expect each of you to bear the burden of figuring out mine. Instead, I want you to apply your own knowledge, preference, and perspective to each review. You will grow intellectually throughout the semester and I will point out the indicators of growth.
- there are individual differences that may interfere with your ability to provide a sound scientific review - at least initially. You will soon realize that science can be reviewed by anyone regardless of your content knowledge. Despite my early emphasis on this point, very few of you will accept this at face value. Content knowledge is important and serves as an essential ingredient to really appreciate the scientific contribution; those lacking the knowledge ought not be penalized.
- I cannot determine how much thought or effort you put into a review. Some may argue that word count or number of points serve as good proxies for effort; I disagree. As I mentioned previously, you may lack sufficient perspective to critique an article. Your job - as I see it - is to review a paper according to what you do know and not according to what someone deems you ought to know. Read each paper as if you were the intended audience and review it based upon what you know and do not apologize.

I expect every student to submit a review for each of the assigned articles at the specified time. The due dates for those reviews are explicitly stated in the syllabus and the course website. Please be sure to conform to these policies and your grade will reflect your effort.

Academic Honesty

I must state for the record that cheating of any kind will be dealt with by rules set forth in the University Honor Code (see http://www.gmu.edu/catalog/apolicies/index.html). I prefer never to have any academic integrity problems arise during the semester. The aim of graduate education is to learn material that many others have not learned and master this material to ensure your future success. The degree you receive reflects the hard work you put into your courses. Please do not cheat yourself by misrepresenting your effort. Do the work or accept the consequences. Spend your effort learning the material and avoid being overly grade conscious. With a concerted effort to learn, you will not be tempted to cheat. Please note that academic dishonesty is not akin to studying with your classmates.
I strongly encourage you to study together, exchange notes, and offer each other constructive feedback about your review preparation. My course is designed to eliminate any possibility of dishonesty. The only avenues to cheat yourself is by plagiarizing your critique. So, let me repeat myself; please study with one another. I demand it.

Disability Accommodations

If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center (DRC) at 703-993-2474. All academic accommodations must be arranged through that office.

Topics

Below are a list of selected topics with a sample of relevant readings. Note that there are fewer topics than weeks in a semester due to the time requirements for the four intensive reviews.

- **General Design** - all methods of research design including experimental, quasi-experimental, and non-experimental design along with the various threats to internal and external validity started with this seminal monograph - we will start there as well.
- **Philosophy of Science** - topics relevant to the logic of inquiry and causal inference.
- **Randomization and Experimental Design** the readings below represent a wide assortment from the literature pertaining to random assignment and its role in countering many threats to internal validity.
- **Sampling** - this topic focuses primarily on the selection of experimental units and how sampling affects causal generalization.
- **Measurement, variables and hypothesis testing** - topics included during this week are relevant to variable selection and hypothesis testing.
- **Quasi-Experimental** when randomization fails us, we must still press on. These articles address the problems of non-equivalent group designs and how we might consider analyzing them.


Causal Generalization and Construct Validity - these two topics are very broad but essential for scientists to understand.


Causal Inference - the root of scientific inquiry is causal inference and these articles address the many facets of both philosophical causality as well as experimental causality.


Causal Analysis - we must analyze data to draw valid causal inferences. These papers address several approaches to reasonable inferential methods.


Additional Readings

Throughout the semester, I will post additional readings on the course website (see URL in the header). These readings include the articles you will review as part of your course grade. Please consult the course website every week for updates. I usually send out an email message alerting students to updates to the website but there are times when I simply forget to warn you. As a general rule, assume I will not alert you and, to avoid missing a reading, go to the course website every Sunday to check for readings. If you visit the website early enough in the week, you will be easily able to read the additional material.