

## Psychology 633 Research Methods

Spring 2012

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**Office Hours:** Tuesday 11:00 - noon and by appointment

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**Purpose:** This graduate seminar is intended to develop students' skills in designing and conducting research. This will cover aspects of formulating research questions, considering various designs to answer those questions, selecting measures, and considerations in collecting the data. It is assumed that students will have had exposure to classical experimental design such that more emphasis will be placed on quasi-experimental designs and surveys.

### Texts:

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*. New York: Houghton Mifflin Company.

### Grading:

Exam	30%
Projects (individual and group projects) <sup>a</sup>	35%
Research proposal	35%

a. Projects that are not specifically assigned as groups projects are expected to be done on your own without the help of other individuals (classmates, coworkers, colleagues, faculty members); resources such as published articles, books, chapters, and internet materials are acceptable sources of assistance for individual and group projects.

Students are expected to have read the material before class and be prepared to discuss the readings. Class time will be provided for students to demonstrate that they understood the material covered in the readings.

**Exam:** The exam will focus on the readings and will consist of short answer questions.

**Projects:** For certain chapters/reading assignments, students are to (1) find an example of the particular research design discussed in the reading that has been published in the industrial and organizational psychology literature, (2) prepare a written summary of the method focusing on the strengths and weaknesses of the study, and (3) be prepared to present a critique of the study design (critiques should include strengths and weaknesses).

**Research proposal:** Students are to write a research proposal to address a specific research question. The proposal should be the strongest design that is both feasible while minimizing threats to the validity of the findings.

**Honor Code statement:** George Mason University has an Honor Code, which requires all members of this community to maintain the highest standards of academic honesty and integrity. Cheating, plagiarism, lying, and stealing are all prohibited.

- All violations of the Honor Code will be reported to the Honor Committee.
- See [honorcode.gmu.edu](http://honorcode.gmu.edu) for more detailed information.

**Disability Resource Center:** 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.

**University Writing Center <http://writingcenter.gmu.edu/>**

The University Writing Center provides writing services to students (both undergraduate and graduate), at no charge. You may find it useful to go there for consultation.

## Tentative Course Calendar

Jan. 24	Class Orientation
Jan. 31	SCC1: Experiments and generalized causal inference
Feb. 7	SCC2. Statistical conclusion validity and internal validity
	SCC3. Construct validity and external validity Threats to validity handout
Feb. 14	SCC4. Quasi-experimental designs that either lack a control group or lack of pretest observations on the outcome <b>Project 1 due</b>
Feb. 21	SCC5. Quasi-experimental designs that use both control groups and pretests <b>Project 2 due</b>
Feb. 28	SCC6. Quasi-experiments: Interrupted time-series designs SCC7. Regression discontinuity designs <b>Project 3 due</b>
Mar. 6	Exam
Mar. 13	Spring Break
Mar. 20	SCC8. Randomized experiments: Rationale, designs, and conditions conducive to doing them <b>Project 4 due</b>
Mar. 27	SCC9. Practical problems 1: Ethics, participant recruitment, and random assignment
April 3	SCC10. Practical Problems 2: Treatment implementation and attrition
April 10	SCC11. Generalized causal inference: A grounded theory
April 17	SCC12. Generalized causal inference: Methods for single studies <b>Project 5 due</b>
	SCC13. Generalized causal inference: Methods for multiple studies <b>Project 6 due</b>
	SCC14. A Critical assessment of our assumptions
April 24	SIOP
May 1	Experience sampling methodology
	Schimmack, Y. (2003). Affect measurement in experience sampling research. <i>Journal of Happiness Studies</i> , 4, 79-106.
	Scollon, C. N., Kim-Prieto, C., & Diener, E. (2003). Experience sampling: Promises and pitfalls, strengths and weaknesses. <i>Journal of Happiness Studies</i> , 4, 5-34.
	Smyth, J. M., & Stone, A. A. (2003). Ecological momentary assessment research in behavioral medicine. <i>Journal of Happiness Studies</i> , 4, 35-52. <b>Project 7 due</b>
May 8	<b>Research Proposal due</b>