

# U297: Research Design

## Department of Planning, Policy, and Design

**Class Meets:** Thu 2:00pm-4:50pm, SST 120  
**Instructor:** Tim Bruckner  
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**Office Hours:** SE I Rm 218 F, Mon 1:35pm-3:05pm, or by app't.  
**EEE:** Readings, Grades, and Schedule Available on EEE.

The key objective for doctoral study involves creation of new knowledge. Research design and methodology serve as core elements that assist the student with this process. Design elements include formulating a well-defined research question and identifying appropriate methods and data sources to address your question. Persons conducting research in planning, policy, and design face a challenge in that the field does not converge on one “correct” research design. Rather, the field provides a wide array of designs and methodologies to understanding social phenomena and constructing knowledge. In this course, I will provide rigorous training on research design in the social sciences. The main objectives for the course are (1) to propose a pragmatic framework for social scientific inquiry; and (2) to familiarize students with research designs and methodologies that serve as the basis of a research proposal or dissertation. Note that this course will only briefly cover methodological issues such as interviewing techniques and statistical tests. *Also, since this course is geared to doctoral study, masters-level students require my express approval to enroll in this course.*

### Specific learning objectives:

By the end of the course, I expect that students will have gained the following knowledge and/or skills:

- **Describe** the iterative process of the construction of knowledge
- **Formulate** a well-defined, feasible, and testable research question
- **Compare** the strengths and limitations of various research designs in relation to your specific aims
- **Locate**, within the taxonomy of methodologies, the appropriate tools to address your specific question
- **Apply** the elements of a structured literature review to your topic
- **Critically evaluate** design elements of the peer-reviewed literature
- **Write** a coherent and compelling research proposal that reflects mastery of all the aforementioned skills

## Required Texts:

1. Frankfort-Nachmias, C. and D. Nachmias. 2000 (6th edition). *Research Methods in the Social Sciences*. New York, NY: Worth Publishers. (note: 7<sup>th</sup> edition is ok too, but more expensive). Hereafter referred to as **FNN**
2. Yin, Robert. *Case Study Research: Design and Methods*. 2009 (4th Edition). Thousand Oaks, CA: Sage Publications. Hereafter referred to as **YIN**
3. Locke, Lawrence F., Waneen Wyrick Spirduso, and Stephen J. Silverman. 2000 (4th Edition). *Proposals that Work: A Guide for Planning Dissertations and Grant Proposals*. Thousand Oaks, CA: Sage Publications. Hereafter referred to as **LSS**

I will disseminate other required readings either on EEE or as class handouts. I reserve the right to add or reorganize assigned readings as appropriate.

## Work Requirement:

I intend to run this class more as a seminar than as a lecture series. As the work requirement indicates (below), class participation, in terms of thoughtfulness not quantity, plays an important role in determining the final grade. Many of our discussions will involve assigned readings. To ensure thought-provoking discussions, I expect that students will have read the assignments before the associated class lecture (except for the first session). In addition, throughout the class, I will ask students to present their work and receive constructive criticism from their colleagues.

Approximate grading weights appear as follows:

Midterm	20%
Research Proposal and component drafts	50%
Class Participation	25%
Completion of surveys/evaluations*	<u>5%</u>
TOTAL	100%

\* 1% for First Week Survey, 2% for Midterm Evaluation, 2% for Final Evaluation.

The midterm will take place in class on **May 15<sup>th</sup>** and will cover material through May 15<sup>th</sup> (excluding LSS). The final Research Proposal will be due on Friday **June 7<sup>th</sup>, 5pm**. I will hand out detailed guidelines for the Research Proposal in class.

I will assign grades on point total for course as follows:

90 and above	A
86 – 89	A-
83 – 85	B+
80 – 82	B
Below 80	B- and lower

**Week 1: April 3<sup>rd</sup>**

**Course overview**

**The creation of knowledge and the search for a paradigm**

**Literature reviews**

Readings:

FNN: pp. 2-22, pp. 487-497

YIN: vii-viii, Chs 1 & 2

LSS Chs 1 & 4

Discussion: Epistemological Issues

Progress:

- prepare a description of proposed research (2-5 pages) that includes the following components: overview of the research problem; the research question; contribution of proposed research.
- begin literature review

**Week 2: April 10<sup>th</sup>**

**Qualitative Research**

**Guest Speaker: Maria Rendon**

Readings:

- Lofland et al. In: Analyzing Social Settings. Wadsworth, 2006. pp. 1-6.

- NSF Workshop (2003): "General Guidance for Developing Qualitative Research Projects", pp. 9-16; and Silbey, Susan, "Designing Qualitative Research Projects" pp. 121-125.

- Suddaby, Roy. "From the Editors: What Grounded Theory is Not" *Academy of Management Journal*. pp. 633-642

- Small, Mario Luis. How many cases do I need? *Ethnography* 2009; DOI: 10.1177/1466138108099586

Discussion: TBD

Progress:

- Continue to revise and expand research proposal, including discussion of operationalizing concepts and variable measurement

**Week 3: April 17<sup>th</sup>**

## Fundamentals of the Research Process

### Readings:

FNN: pp. 23-86

LSS Chs 2 & 3

Discussion: Proposed Research

### Progress:

- Continue to develop proposal including theoretical/conceptual framework, identification of hypotheses (if any), key concepts, variables, units of analysis (5-8 pages).
- Continue literature review
- Complete/Pass the UCI Institutional Review Board (IRB), Human Research Tutorial, online at: <http://apps.research.uci.edu/tutorial/>
- **Hand in 5-8 page draft & list of references, by Fri Apr. 19th**

## Week 4: April 24<sup>th</sup>

### Experimental & Quasi-Experimental Designs: part I

### Readings:

- FNN, pp. 87-111; 196-200

- Shadish, Cook, Campbell, Ch 1: Experiments and Generalized Causal Inference. pp. 1-32. In: Experimental and Quasi-Experimental Designs

- M. Boarnet et al. Evaluation of the California Safe Routes to School Legislation: Urban Form Changes and Children's Active Transportation To School. Am J Prev Med 2005; 28:134-140.

Discussion: Use of experimental and quasi-experimental design, as well as proposed research. Be prepared to discuss Boarnet et al. article in depth.

**\*\* Discussion Leaders:**

### Progress:

- **Submit annotated bibliography**, based on your literature review to date, including at least 10 references relevant to your research proposal (3-5 pages). **Annotated bibliography due Friday Apr. 25<sup>th</sup>**
- Continue to revise and expand research proposal, including literature review, refinement of theoretical/conceptual framework, and discussion of research design

**Week 5: May 1<sup>st</sup>**  
**Experimental & Quasi-Experimental Designs, part II**  
**Begin Measurement**

Readings:

- FNN: pp. 112-60
- Ewing: Measuring sprawl and its impact. *pp1-36 only*
- LSS Chs 5-7

Discussion: Finish discussion of research designs from Week 3; your proposed research; and Ewing article.

**\*\* Discussion Leaders:**

Progress:

- Revise and expand research proposal, integrating your literature review and discussing the internal and/or external validity of your proposed design (15-20 pages)
- Continue literature review

**Week 6: May 8<sup>th</sup>**  
**Finish Measurement**  
**Sampling**

Readings:

- FNN: 161-204
- Kalton Ch 1. Introduction. In: Introduction to Survey Sampling. Sage, 1983.

Discussion: Student measurement issues and sampling designs.

Progress:

- Review peer comments on proposal and revise and expand. ***Verify with Prof. Bruckner that another student has read, and commented on, your 15+ page draft and annotated literature review.***

**Week 7: May 15<sup>th</sup>**  
**MIDTERM EXAM**  
**Case Study Design**

Readings:

- YIN Ch 3 & 4 (also review YIN Ch 1-2; chapters 5 & 6 are optional)
- FNN: 256-73
- Bradshaw TK. Communities not fazed: Why military base closures may not be catastrophic. JAPA 1999, 65(2): 193-206.

Discussion: Bradshaw case study and student research.

**\*\* Discussion Leaders:**

Progress:

- Continue to work on research proposal. Include data collection methods

**Week 8: May 22<sup>nd</sup>**

## **Survey & Questionnaire Design Secondary Data Sets**

### Readings:

- FNN: 205-54; 275-302
- Kalton Ch 9. Nonresponse. In: Introduction to Survey Sampling. Sage, 1983.

Discussion: Results of diagnostic exam. Questionnaire examples; proposal questions and progress.

### Progress:

- ***15-30 page draft submitted by Fri May 24th***

## **Week 9: May 29<sup>th</sup>**

### **Critiquing Research Designs; Research Ethics**

### Readings:

- Article for the in-class critique will be assigned later

Discussion: Critique design of article in the style of a mock journal review; begin student presentations of proposals; discuss research ethics.

### Progress:

- Include data analysis approach in proposal (20-35 pages).

## **Week 10: June 5<sup>th</sup>**

### **Proposal Writing, Dissertation, and Publishing**

### Readings:

- FNN: 485-97
- LSS: review Chs 4-6
- Lin AC. Bridging Positivist and Interpretivist Approaches to Qualitative Methods. Policy Studies Journal 1998; 26:162-80.

Discussion: Continue research ethics discussion; student presentations of proposals for class comments.

### Progress:

**Finalize research proposal to submit for final grade (minimum of 30 pages; up to 50 pages text). Due at 5pm on Friday, June 7<sup>th</sup>, 2013.**