U297: Research Design

Department of Planning, Policy, and Design

Class Meets: Thu 2:00pm-4:50pm, SST 120
Instructor: Tim Bruckner
tim.bruckner@uci.edu  tel: 949 824-5797
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:**


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:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>Midterm</td>
<td>20%</td>
</tr>
<tr>
<td>Research Proposal and component drafts</td>
<td>50%</td>
</tr>
<tr>
<td>Class Participation</td>
<td>25%</td>
</tr>
<tr>
<td>Completion of surveys/evaluations*</td>
<td>5%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100%</td>
</tr>
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* 1% for First Week Survey, 2% for Midterm Evaluation, 2% for Final Evaluation.

The midterm will take place in class on **May 15th** and will cover material through May 15th (excluding LSS). The final Research Proposal will be due on Friday **June 7th, 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 3rd
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 10th
Qualitative Research
Guest Speaker: Maria Rendon

Readings:
  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 17th
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
- **Hand in 5-8 page draft & list of references, by Fri Apr. 19th**

Week 4: April 24th
Experimental & Quasi-Experimental Designs: part I

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

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. 25th**
- Continue to revise and expand research proposal, including literature review, refinement of theoretical/conceptual framework, and discussion of research design
Week 5: May 1st
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 8th
Finish Measurement
Sampling

Readings:
- FNN: 161-204

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 15th
MIDTERM EXAM
Case Study Design

Readings:
- YIN Ch 3 & 4 (also review YIN Ch 1-2; chapters 5 & 6 are optional)
- FNN: 256-73

Discussion: Bradshaw case study and student research.

** Discussion Leaders:

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

Week 8: May 22nd
Survey & Questionnaire Design
Secondary Data Sets

Readings:
- FNN: 205-54; 275-302

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

Progress:
- 15-30 page draft submitted by Fri May 24th

Week 9: May 29th
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 5th
Proposal Writing, Dissertation, and Publishing

Readings:
- FNN: 485-97
- LSS: review Chs 4-6

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 7th, 2013.