

Fall 2016 (3 hrs)

PPPE 6310-001 (CN 85767)

Thursday: 7:00 - 9:45 pm (SLC 1.204)

Office Hours (GR 3.224): Monday 11:00-12:30 and 5:30-6:30

Wednesday 11:00-12:30

Thursday 5:30-6:30 and by appointment

e-mail: e-learning "**course messages**" for all course purposes

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Research Design I

This course introduces the foundations of social science research design. Covered topics include the theory and the logic of scientific inquiry; structure of research language and thought; key components of the research enterprise; measurement methods; sampling techniques; experimental, quasi-experimental and non-experimental/qualitative designs; survey methods, arts of the interview, and scaling measures. Along the way of discussing these themes, students will learn how to define and refine research questions, assess the relative strengths and weaknesses of alternative research designs intended to answer the questions, identify appropriate tools to carry out credible studies that yield information worthy of analysis and interpretation, and prepare a brief research proposal. The course is of value to students who intend to conduct and/or consume research in their future careers and, more generally, to anyone interested in finding out about different ways to understand why people and organizations behave as they do.

A. Learning Outcomes: Students, through class readings and assignments, will become:

- ❖ familiar with broad range of methods used in social sciences research;
- ❖ more able to distinguish problems that are and are not amenable to empirical research;
- ❖ adept at recognizing strengths and weaknesses of alternative research designs;
- ❖ proficient at critically assessing the validity of claims based on empirical research, and
- ❖ skilled at forming good research questions and designing effective means to answer them

B. Required Texts:

Bingham, R. & Felbinger, C. 2002. *Evaluation in Practice*: New York: Chatham [BF]

Trochim, W. (2006) *The Research Methods Knowledge Base*. 2nd edition. [RKB]

at: <http://www.socialresearchmethods.net/kb/>

[or book: *The Research Methods Knowledge Base* 3rd ed (2007). Atomic Dog]

C. Recommended Texts (for students who are very curious about research)

Creswell, John. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* 3/e. 2012. W., Sage Publications

Blair, J., Czaja, RF. and Blair, EA. *Designing Surveys: A Guide to Decisions and Procedures* 3/e. 2014. Sage Publications

Booth, W.C., Colomb, G.G., and Williams, J.M. *Craft of Research*, 3/e 2008. University of Chicago Press.

Shadish, WR, Cook, TD and Campbell, DT. *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*. 2001. Houghton Mifflin

D. Grading structure is: A(4.0), A-(3.67), B+(3.33), B(3.00), B-(2.67), C+(2.33), C(2.00), F(0), based on 4 assignments, a research proposal and two examinations, as follows:

three individual assignments (10% each):	30 %
one individual research project proposal:	20 %
two group exercises (10% each)	20%
one mid-term examination	15%
one final assessment	15%
Total:	100 %

E. Class Schedule and Readings:

1. August 25: Introduction

USC Library Research Guide: <http://libguides.usc.edu/writingguide/purpose>

2. September 1: Causality

Parsons, Talcott. *The Role of Theory in Social Research*. American Sociological Review, Vol. 3, No. 1 (Feb., 1938), pp. 13-20

Centre for Health Promotion. *Tipsheet: Summary of Social Science Theories*. U Toronto 2003

Samson, A. *The Behavioral Economics Guide 2016*. Behavioral Science Solutions Ltd

- Selected Behavioral Science Concepts, pp 101-132

Akers, R. and Sellers, C. *Student Study Guide for Criminological Theories: Introduction, Evaluation, Application*, 6th ed. Oxford University Press, 2013

Theory lists for...

psychology: http://changingminds.org/explanations/theories/a_alphabetic.htm

social psychology https://en.wikipedia.org/wiki/List_of_social_psychology_theories

learning: <http://www.learning-theories.com/>

<http://www.instructionaldesign.org/theories/>

communication: <http://communicationtheory.org/list-of-theories/>

http://www.afirstlook.com/edition_7/theory_list

<https://www.utwente.nl/cw/theorieenoverzicht/Alphabetic%20list%20of%20theories/>

(for this site copy theory name from list to search box to link to appropriate page)

3. September 8: Research Language and Thought

RKB:

- Foundations
 - Language Of Research
 - Five Big Words
 - Types of Questions
 - Time in Research
 - Types of Relationships
 - Variables
 - Hypotheses
 - Types of Data
 - Unit of Analysis
 - Two Research Fallacies
 - Philosophy of Research
 - Structure of Research
 - Deduction & Induction
 - Positivism & Post-Positivism
 - Introduction to Validity
 - Conceptualizing
 - Problem Formulation
 - Concept Mapping

Gaventa, J. 1993. *The Powerful, the Powerless and the Experts: Knowledge Struggles in an Information Age*, in Park, P., Brydon-Miller, M., Hall, B. and Jackson, T (eds.), Voices of Change: Participatory Research in the US and Canada. Bergin and Garvey, pp. 21-40.

de Vaus, D. 2001. *Part 1: What is Research Design?* Research Design in Social Research, Sage Publications.

4. September 15: Design Fundamentals

BF: Chapter 2 Evaluation Designs

RKB:

- Design
 - Internal Validity
 - Establishing Cause & Effect
 - Single Group Threats
 - Regression to the Mean
 - Multiple Group Threats
 - Social Interaction Threats
 - Introduction to Design
 - Types of Designs

5. September 22: Measurement

BF: Chapter 3 Measurement

RKB:

- Measurement
 - Construct Validity
 - Measurement Validity Types
 - Idea of Construct Validity
 - Convergent & Discriminant Validity
 - Threats to Construct Validity
 - Reliability
 - True Score Theory
 - Measurement Error
 - Theory of Reliability
 - Types of Reliability
 - Reliability & Validity

6. September 29: Sampling

RKB:

- Sampling
 - External Validity
 - Sampling Terminology
 - Statistical Terms in Sampling
 - Probability Sampling
 - Nonprobability Sampling

Michael, R.T., Gagnon, J.H., Laumann, E.O. and Kolata, G. 1994. "Chapter 2: The Sex Survey," in Sex in America: A Definitive Survey. Warner Books, pp. 5-41

7. October 6: Experimental Designs

BF: Chapter 5: Pretest-Posttest Control Group Design

6: The Solomon Four-Group Design

7: Posttest Only Control Group Design

RKB:

- Experimental Design
 - Two-Group Experimental Designs
 - Probabilistic Equivalence
 - Random Selection & Assignment
 - Classifying Experimental Designs
 - Factorial Designs
 - Factorial Design Variations
 - Randomized Block Designs

- [Covariance Designs](#)
- [Hybrid Experimental Designs](#)

Lovaglia, M. 2003. “*From Summer Camps to Glass Ceilings: The Power of Experiments.*” Contexts, Fall. pp. 42-49.

8. October 13: Quasi-Experimental Designs

Midterm Examination (1st hour)

BF: Chapter 8: Pretest-Posttest Comparison Group Design
 9: Interrupted Time-Series Comparison Group Design
 10: Posttest Only Comparison Group Design

RKB:

- [Quasi-Experimental Design](#)
 - [The Nonequivalent Groups Design](#)
 - [The Regression-Discontinuity Design](#)
 - [Other Quasi-Experimental Designs](#)

Burke, R.J. and Mikkelsen, A. 2004. *Benefits to police officers of having a spouse or partner in the profession of police officer*, Psychological Reports, 95 (2) pp. 514-6

9. October 20: Reflexive Designs

BF Chapter 11 One-Group Pretest-Posttest Design
 12: The Simple Time-Series Design

de Anda, D. 2006. *Baby Think It Over: evaluation of an infant simulation intervention for adolescent pregnancy prevention*, Health and Social Work, 31 (1) pp. 26-35

10. October 27: Surveys and Interviews

RKB:

- [Survey Research](#)
 - [Constructing the Survey](#)
 - [Types Of Questions](#)
 - [Question Content](#)
 - [Response Format](#)
 - [Question Wording](#)
 - [Question Placement](#)
 - [Interviews](#)

Schuman, H. 2002. “*Sense and Nonsense about Surveys.*” Contexts. Summer, pp 40-47.

Patchin, J.W. 2006. *Bullies Move Beyond the Schoolyard: A Preliminary Look at Cyberbullying*, Youth Violence and Juvenile Justice, vol. 4 no. 2 pp. 148-169

11. November 3: Scaling Measures

RKB:

- [Scaling](#)
 - [General Issues in Scaling](#)
 - [Thurstone Scaling](#)
 - [Likert Scaling](#)
 - [Guttman Scaling](#)

Lovelace, M. and Brickman, P. 2013. *Best Practices for Measuring Students’ Attitudes Toward Learning Science*. CBE—Life Sciences Education, Vol. 12, Winter. 606–617

Boone, HN and Boone DA, 2012. *Analyzing Likert Data*, Journal of Extension. Volume 50 Number 2. April. Article Number 2TOT2

12. November 10: Practice *Class research exercise*

13. November 17: Non-Experimental Designs

RKB:

- Qualitative Measures
 - The Qualitative Debate
 - Qualitative Data
 - Qualitative Approaches
 - Qualitative Methods
 - Qualitative Validity
 - Unobtrusive Measures

Edin, K. and Lein. L. 1997. Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work. New York: Russell Sage. Chapters 1 and 2

Few, A.L. 2005. The Voices of Black and White Rural Battered Women in Domestic Violence Shelters, *Family Relations*, Volume 54, Number 4, pp. 488-500

Trinka. J. 2002. Shopping center fire zone parking violators: an informal look, *Perceptual and Motor Skills*, 95 (3 pt 2), pp 1215-6

14. December 1: Research Proposal Presentations

15. December 8: *Research Proposal and Final Examination due before 1:00pm*

F. Internet Data Resources Worth looking at..

- ✓ FBI Uniform Crime Reports: <https://ucr.fbi.gov/>
- ✓ FedStats, compiled by various US agencies <https://fedstats.sites.usa.gov/>
- ✓ Freedom House Rankings of Political/Economic Freedom: <http://www.freedomhouse.org>
- ✓ General Social Survey: <https://gssdataexplorer.norc.oregon.edu/>
- ✓ Int'l Institute for Democracy voter turnout: <http://www.idea.int/vt/index.cfm>
- ✓ Inter-University Consortium of Political, Social Research (ICPSR): <http://www.icpsr.umich.edu>
- ✓ International City/County Management Association: <http://icma.org/en/icma/home>
- ✓ US Census Bureau <http://www.census.gov/>
- ✓ Statistical Abstract: <https://catalog.data.gov/dataset/statistical-abstract-of-the-united-states>
- ✓ UNDP, Human Development Indicators: <http://hdr.undp.org/en/statistics>
- ✓ World Bank, World Development Indicators: <http://www.worldbank.org/en/research>
 - Microdata Library: <http://microdata.worldbank.org/index.php/home>
- ✓ World Resources Institute, natural resource and climate data: <http://www.wri.org>

G. Assignments

A1 (*maximum 2 pages, single-spaced*)

Choose a social science or policy topic to investigate for class. It is helpful to choose topic that interests you, but it **must be open to “scientific” inquiry**, i.e., amenable to **experimental or quasi-experimental** research designs rather than to non-experimental designs or descriptive analyses. Choice of topic is important because it sets the focus of most other assignments, including the research project proposal.

Then identify **6** articles in *refereed* journals that describe some kind of **experimental or quasi-experimental** research related to your topic, and provide proper **bibliography** that lists these articles as well as the authors' **abstracts**, or the **first1-2 paragraphs** of the text if there is no abstract.

Have the complete articles ready to send to me if I ask for them, i.e., not just the abstracts.

A2

In no more than a half-page for each of the two following elements, discuss the main:

- hypothesis(es) that is(are) the basis of your research proposal
- concepts/theories and causal relationship(s) embedded in the hypothesis(es).

A3

Prepare a table that dissects the 6 articles identified in Assignment 1. The table should identify the research topics/subjects and explain how the author(s) chose them. You should distinguish between independent and dependent variables, and describe how researchers operationalize them. The table template is as follows:

Design Item	Article 1	Article 2	Article 3	Article 4	Article 5	Article 6
1. Title, Author, Year (i.e. citation)						
2. Purpose of Study						
3. Unit of analysis and # of units						
4. Sample selection method(s)						
5. Type/structure of design(s)						
6. Data collection method(s)						
7. Dependent variable(s)						
8. Main independent variables						
9. Methodological issues/concerns						

A4

Develop a survey instrument of about 10 items on a social and/or policy science research question that interests you (does not have to be the same as your research proposal topic) which produces data to help answer the question. Ask 15 students anywhere on campus whether they are willing to be interviewed for the survey and, if they say yes, conduct the interview. Produce a 1-page report that describes: a) the research question, b) the data required to answer the question, c) a summary of the data produced by your survey (nice tables are good), and d) what analysis of your data tells you about the answer to your research question. Attach your survey instrument.

H. Class Exercises: TBD

I. Research Proposal

The research proposal must contain the five (5) sections outlined below. It is usually helpful to use sub-sections, particularly in Sections 2 and 3. If relevant, class assignments can fold into this final project.

1. Introduction to Research Problem 15 points, 1.5 pages.

This opening section clarifies the topic of interest and indicates why it is relevant to the social sciences, to a specific discipline or to a public policy issue. If others are to support your work, it is essential to justify the research objective.

- Is topic an important substantive issue in a specific discipline or profession?
- Is the proposal going to test a theory with different subjects/data; or with improved methods?
- Is the topic a major public policy problem?; or
- Is the purpose to evaluate a program, policy or law?

2. Review of Research Literature 25 points, 1.5 pages.

This assesses relevant studies by their contribution to knowledge about the problem at hand and by research design issues, such as reliability, validity and sampling that render the contribution more or less useful.

To review/assess prior research, issues addressed typically include the following (though not all these issues are relevant to all articles):

- ✓ research purpose, including theoretical/conceptual framework;
- ✓ research hypothesis;
- ✓ operationalization of key indicators;
- ✓ type of research design;
- ✓ selection and adequacy of subjects, including unit of analysis;
- ✓ methods and procedures for data collection; and
- ✓ statistical analysis (if appropriate)

In addition to what an article reports, one must think about what it does not measure (i.e., issues and concepts). And if the intent of the research is causal, one must think specifically about how well it meets criteria to establish causation.

The conclusion of this section should identify the important next steps for research, and thereby lead directly to gaps that your proposed study intends to fill.

3. Methodological Plan for the study, 40 points, 2 pages.

This section discusses how the proposal will respond to the particular mix of opportunities and constraints associated with the topic. It is appropriate here to address the 7 issues listed in the previous section and to justify the proposed design and method..

4. Statement of Limitations, 15 points, 1/2 page

The opportunity for an ideal study is rare. So it is always preferable for the researcher to acknowledge problems that may be encountered and present a plan to minimize their consequences. These problems usually turn on sampling or measurement, but not always.

5. References, 5 points, as many pages as needed.

Cite appropriately. Every citation in the text of the proposal must be in bibliography and every item in the bibliography must have a citation in the text. If uncertain about style, use APA or Turabian formats.

J. Guidelines for Preparing and Submitting Assignments and Research Proposal

Writing: The logic and presentation of written submissions must be clear

Format: I have specific preferences, designed to make my reading of your work easier on the eyes. Please adhere to them. Your cooperation will greatly appreciated.

- margins: 1-inch on all sides
- orientation: portrait
- font: times new roman, regular, 12 points (no HTML formatting)
- alignment: left (no justification)
- page numbering: on all pages, centered at the bottom
- line spacing: single-space within paragraphs (not 1.15), double-space between paragraphs

- indentation: none
- assignment title: at top of first page on one line (i.e. no cover sheet)
- student name: next line after the title
- citations in text: in any commonly accepted format (e.g., Smith, 2004)
- bibliography: in standard format (e.g., as you see them at the end of published articles)
- spelling: no errors (i.e., use spelling checker, and also review manually for wrong words)
- grammar: do not be horrible (i.e., use grammar checker set to strictest/most formal level)
- endnotes: place after bibliography (no footnotes)
- tables or graphics: include only if essential, place at very end of document.

Submission Rules:

- submit electronically, via “*Course Messages*” in e-learning
- save attached documents in a format that MS Word can read directly
- document **filename** **MUST** be **last name, first name, assignment number**.
 - e.g., for Bobby Smith, the first assignment filename is: **Smith Bobby A1**
- note: **filename is NOT email subject heading**. It is name given to save the assignment.

K. Syllabus Addendum adapted from the Office of Judicial Affairs

Each student must exercise independent thought, expression and aptitude. This addendum to the syllabus can assist in maintaining academic integrity while seeking scholastic success.

General Comments:

- All assignments and examinations require individual, independent work. Any exception(s) will be clearly identified by the instructor.
- Be sure your name is on all your work.
- Complete and turn in assignments and exams on time and in the required format.
- Retain all research notes and drafts until the assignment has been graded.
- Obtain written authorization from the instructor prior to submitting a portion of academic work previously submitted for any academic exercise. (This includes an individual or group project submitted for another course or at another school.)

Assignments, class paper and examinations: Be prepared:

- to present periodic drafts of work in process
- to correctly and completely reference all sources using the citation format prescribed
- to submit your completed work in a timely and in the prescribed manner.

All episodes of suspected scholastic dishonesty are reported according to University policy. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since such dishonesty harms the individual, all students and the University, policies on scholastic dishonesty will be strictly enforced.

To be as explicit as possible about the meaning of cheating (i.e. academic dishonesty): all assignments or other homework and exams are individual efforts (except when group work is assigned). Students do not collaborate with other students, or discuss assignments with other students prior to submission. Copying of assignments, other homework or exams, in whole or in part, from other students or from submitted academic work from previous semesters is an act of academic dishonesty. For details please see: <http://www.utdallas.edu/conduct/integrity/>

L. Classroom Citizenship

Like academic integrity, debate about opposing views is a cornerstone of higher education. Your opinions matter as well as those of others. Please feel free to express yourself, but with courtesy and respect to all. Although large classes can make participation difficult, it is still the student’s responsibility to engage with the material. This means paying attention and not texting, web surfing,

having loud conversations or other disruptive behaviors. These kinds of behavior may influence a student's grade.

Paying attention to class lectures and discussions is both courteous and helpful for learning. Ignoring lectures and discussions while in class is at the same time impolite and unhelpful. Accordingly, to be on the right side of history, knowledge and the instructor, all of which influence course grade, it is impolitic for cell phones, laptops, tablets, e-Abacuses or other electronic gizmos to be in use during class...and positively sinful during quizzes and exams. So for own solace of mind and GPA benefit please turn and keep all gizmos off unless the instructor invites students to use them for specific class business. Recording devices may not be used during class.

M. Additional Course Policies:

Make-up Exams	none
Extra Credit	none
Late Work	10% of assignment value is lost for each day overdue
Class Attendance	not obligatory

N. UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. It also provides information about your rights and links for a variety of services available to students: <http://go.utdallas.edu/syllabus-policies>

All descriptions and timelines above are subject to change at the discretion of the instructor