PS2325F: Research Design in Political Science

Department of Political Science - Western University, Fall 2021

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Course description

This course introduces students to basic concepts and methods of research in the social sciences and, in particular, in political science. Students will learn about how the scientific method of research can be applied to the study of human behaviour, adopting both qualitative or quantitative methods of analysis. In the first part of the course, students will learn about how to identify research questions and conduct literature reviews. In this same section, we will discuss questions related to research ethics and how such concerns can affect the kinds of questions one can ask and how other questions can be answered empirically. Next, we will discuss questions related to argumentation. These include defining clear concepts of interest and proposing strong arguments for building theories that will subsequently be evaluated with data. The following section covers how researchers go about choosing among methods of analysis and how cases are selected to adequately evaluate their research questions. Finally, the course will cover a series of commonly used qualitative and quantitative methods of analysis, including interviews, focus groups, surveys, and experiments.

Required course text

Brancati, D. 2018. Social Scientific Research. Sage. (hereafter Brancati)

Course objectives

- Explain the goals, subjects, and orientation of social science research; identify the steps in the scientific method;
- Present the ethical concerns surrounding the use of human subjects; detail the ethical issues regarding publication like transparency, credit stealing and others;
- Introduce criteria for identifying a good research topic; identify ways research can make theoretical and empirical contributions; suggest ways to find inspiration for research;
- Describe the purpose and content of a literature review; discuss how to summarize and synthesize research for a literature review;
- Define concepts and their importance to research; describe the steps involved in building effective concepts;
- Differentiate between deductive and inductive reasoning; define necessary, sufficient, and (neither) necessary and (nor) sufficient conditions; examine different directions through which explanatory factors influence outcomes; identify common mistakes in causal arguments;
- Describe the attributes of qualitative and quantitative research; define hypothesis building, hypothesis testing, causal inference, generalizability, and replicability;
- Develop an objectives-based typology of mixed methods research designs; compare and contrast
 each of the objectives presented in this typology, namely design, concatenation, gap-filling, triangulation, and interpretation;

- Discuss why and how the number of cases included in a study matters; define and describe random
 and non-random sampling methods; explain selection bias and the problems that it represents for
 research;
- Differentiate among types of interview and interview modes; describe the strengths and weaknesses of interviews for theory building and theory testing;
- Discuss the utility of focus groups for hypothesis building and hypothesis testing;
- Identify different types of measures according to their response categories; describe the criteria used to evaluate measurement quality; define random and systematic measurement error and the problems each represent for research;
- Compare and contrast observational and non-observational data; provide criteria with which to evaluate data quality and present techniques for identifying high quality data;
- Identify the different types of surveys used in social science research; provide guidance on designing survey questionnaires; identify types of survey modes and their appropriateness for certain respondents;
- Identify the different types of experiments used in social science research; discuss the strengths and weaknesses of experiments vis-à-vis other research methods; present the criteria commonly used to evaluate the quality of experiments;
- Define the key features of observational studies; present the advantages and disadvantages of observational studies vis-à-vis other research methods; discuss the difficulty of causal inference inobservational studies and the techniques available to address it.

Course format

This course is delivered in an online format asynchronously. Weekly lectures will be delivered electronically on OWL. Communications with the instructors, teaching assistants and students should be primarily done by email.

Student assessment

Students will be assessed through 6 assignments (each worth 5% of the final grade), a midterm (35%) conducted online (on October 19 from 9:30am to 10:30am), and a final exam (35%) also conducted online (during the final exam period, time and day to be determined). Assignments will be posted on OWL. No late assignments will be accepted.

Due dates for assignments

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#1: September 20, 11:55pm;
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#2: September 27, 11:55pm;

#3: October 18, 11:55pm;

#4: November 15, 11:55pm;

#5: November 22, 11:55pm;

#6: November 29, 11:55pm.

Topics and readings

Week #1 (September 8-10): Research in social science

♦ Brancati Chapter 1 What is Social Science Research?

Week #2 (September 13-17): Research ethics

♦ Brancati Chapter 2 Research Ethics

Week #3 (September 20-24): Research questions and literature reviews

- ♦ Brancati Chapter 3 Identifying a Research Question
- ♦ Brancati Chapter 4 Conducting a Literature Review

Week #4 (September 27-October 1): Argumentation

- ♦ Brancati Chapter 5 Building Effective Concepts
- ♦ Brancati Chapter 6 Making Strong Arguments

Week #5 (October 4-8): Method selection and mixed methods research

- Brancati Chapter 7 Method Selection
- ♦ Brancati Chapter 8 Mixed Methods Research

Week #6 (October 12-15): Case selection

♦ Brancati Chapter 9 Case Selection

Week #7 Midterm exam: October 19 from 9:30am to 10:30am

Online multiple choice exam on OWL. Students will have exactly 60 minutes to answer 35 multiple choice questions.

Week #8 (October 25-29): Interviews and focus groups

- ♦ Brancati Chapter 10 *Interviews*
- ♦ Brancati Chapter 11 Focus Groups

Week #9 (November 1-5): Reading Week

Enjoy the break to catch up and rest!

Week #10 (November 8-12): Quantitative measures and data

- ♦ Brancati Chapter 15 Quantitative Measures
- Brancati Chapter 16 Quantitative Data

Week #11 (November 15-19): Surveys

♦ Brancati Chapter 18 Surveys

Week #12 (November 22-26): Experiments

♦ Brancati Chapter 19 Experiments

Week #13 (November 29-December 3): Observational Studies

♦ Brancati Chapter 20 Observational Studies

Final Exam

Online multiple choice exam on OWL. Students will have exactly 60 minutes to answer 35 multiple choice questions. Day and time to be determined.