**Survey Research Design and Analysis**

Oxford University

Department of Politics and International Relations

Trinity Term 2019

**Lectures:** M 9-11:00am, Nuffield College, Clay Room

**Instructor:** Soledad Artiz Prillaman, Nuffield College D5, soledad.prillaman@nuffield.ox.ac.uk

**Overview of Course:**

Surveys are one of the most important sources of data for researchers and their design and analysis is therefore a critical component of a researcher’s tool kit. This course is designed to provide an introduction to methods of survey design and implementation. By the end of the course, students will be able to design their own survey and assess the quality of survey questions, evaluate various sampling strategies and in-field protocols, and identify potential methodological challenges to data quality. The course will cover methodological issues that arise in survey research, including sources of bias, measurement theory, and non-response. The course will also introduce and explore survey data cleaning and coding, descriptive statistics, hypothesis testing, and survey data regression analysis.

**Assessment:**

The course will require the completion of a project and final problem set. Both will be due by the Wednesday of 6th week (June 5th) at 4pm via email to the instructor. The project will involve writing and pre-testing of a short survey and the problem set will facilitate the implementation of survey data analysis tools.

The project requires you to design and pre-test a short survey on a topic of your choice. This survey must be informed by a research question and contain the relevant variables to evaluate your question and hypotheses. Students must submit both a draft of the survey and a short research write-up. For the survey draft, students must submit a document using track changes such that edits following pre-testing are visible. The “final” version should reflect the ready-to-field questionnaire. In addition to the drafting of the survey, you must submit a 3-5 page research proposal detailing your research question and relevant hypotheses and how the survey will help you address this question. In addition, this research proposal should also explain your survey methodology answering such questions as: Who is your target population? What is your sample frame? How will you identify and select respondents? What methodology will you use to collect data? Why? What issues do you anticipate and how will you deal with them? This write-up should also document how the survey questionnaire was pre-tested.

Additionally, students will be given a problem set at the end of class to submit alongside their final project. The problem set can be completed using either Stata or R and the final submission should include a write-up with responses and a well-documented script.

While the survey project must be completed individually, students are welcome to work with their peers on the problem set. The final write-up, however, must be completed on your own.

**Readings:**

Primary readings from the course will be derived from the two following books. Please complete all readings prior to the beginning of class.

Groves, R.M., Fowler, F.J. Jr., Couper, M.P., Lepkowski, J.M., Singer, E., & Tourangeau, R. (2009). *Survey Methodology, 2nd Edition*. New York: Wiley.

Lohr, S. (2009). *Sampling: Design and Analysis.* Cengage.

**Programming:**

The course requires advanced knowledge of either Stata or R. Course materials will provide sample code in both of these softwares.

**Course Outline:**

Week 1 – Instrument Design and Modes of Data Collection

*Lecture Topics*: Introduction to survey methodology; steps to conducting a survey; key concepts of survey methodology; response behavior; comprehension; estimation and judgment; question wording and structure; context; questionnaire pretesting; modes of data collection including face-to-face, telephone, self-administered, administrative records, and online; web surveys; nonresponse; contacting and engaging respondents

*Readings:* Groves et al. Chapters 2, 7, and 8

EGAP, [10 Things to Know about Survey Design](http://egap.org/methods-guides/10-things-survey-design)

Schaeffer, N. C., & Dykema, J. 2011. “Questions for surveys: current trends and future directions.” *Public opinion quarterly*, *75*(5), 909-961.

Berinsky, Adam J., Gregory A. Huber, and Gabriel S. Lenz. 2012. “Evaluating online labor markets for experimental research: Amazon. com’s Mechanical Turk.” *Political analysis* 20(3): 351-368.

Huff, Connor, and Dustin Tingley. 2015. ““Who are these people?” Evaluating the demographic characteristics and political preferences of MTurk survey respondents.” *Research & Politics* 2(3).

Boas, T., Christenson, D. & Glick, D. 2018. “Recruiting Large Online Samples in the United States and India: Facebook, Mechanical Turk and Qualtrics.” *Political Science Research and Methods*.

Week 2 –Nonresponse and Data Quality Control

*Lecture Topics:* Survey non-response, item non-response; missing data; imputation; hiring and training of interviewers; evaluation of interviewer performance; management of data collection; data validation; data quality protocols; high frequency checks; back checks

*Readings:* Groves et al. Chapters 5, 6, and 9

Lohr Chapters 8 and 15

EGAP, [10 Things to Know about Survey Implementation](http://egap.org/methods-guides/10-things-survey-implementation)

Fricker, S., & Tourangeau, R. 2010. “Examining the relationship between nonresponse propensity and data quality in two national household surveys.” *Public Opinion Quarterly*, *74*(5), 934-955.

Week 3 - Sampling

*Lecture Topics:* Probability sampling; sampling frames; simple random sampling; stratification; cluster and multistage sampling; selection weights; sampling errors; coverage error

*Readings:* Groves et al. Chapters 3 and 4

Lohr Chapters 2, 3, and 5

Verba, S., Scholzman, K., Brady, H. & Nie, N. 1993. “Citizen activity: Who participates? What do they say?” *American Political Science Review* 87 (2): 303. (Particular attention to Appendix A)

Week 4 – Survey weights

*Lecture Topics:* Sampling frames; survey weights; post-stratification

*Readings:* Groves et al. Chapters 10

Lohr Chapters 4 and 11

Andrew Gelman’s 2016 Blog Post: [Brexit polling: What went Wrong?](http://andrewgelman.com/2016/06/24/brexit-polling-what-went-wrong/)

*Recommended Readings:* Lohr Chapters 7 and 10