Survey Experiments in Political Science

Matthew Winters, University of Illinois at Urbana-Campaign; mwinters@illinois.edu

This class will expose students to survey experimental research in political science and international relations through concrete examples complemented by methodological readings. The course will review the general methodological logic behind experiments; discuss the strengths, weaknesses, and current uses of survey experiments; and explore some of the frontiers in analyzing experimental data. Students will develop an improved capacity to read research that uses survey experimental methodologies and to think about designing their own experimental and nonexperimental research. At the end of the course, students will have developed, in consultation with the instructor, their own research design using survey experimental methods for a substantive question of interest to them.

Wednesdays, 1-3pm CST

January 18, 25; February 1, 8, 15, 22; March 1, 8

Time Series Analysis

John Freeman (freeman@umn.edu) and Jon Pevehouse (jcpevehouse@wisc.edu)

This class studies statistical techniques for analyzing social processes in time. We begin by discussing political science questions that are inherently dynamic in nature and how the respective data generating (time series processes) are measured. Next, because all discrete time series models are based on it, we review the calculus of finite differences. We then focus on basic concepts and modeling in this genre: stationarity and ARMA models, time series regression models, "reduced form methods" (e.g., vector autoregression), fractionally integrated and nonstationary processes, and error correction models. At the end of the course, in consulation with the students, we cover an advance topic or two such as Bayesian multivariate time series analysis, synthetic control methods [for

causal inference] and/or linear, dynamic panel models. Published works in political science that employ time series concepts and methods are reviewed in class. All students are asked to present a critical evaluation of one peer reviewed research article which employs a time series model. The written assignments are a problem set and two short papers, papers that use two forms of time series analysis to answer a research question of interest to each student.

Fridays 11am-1pm CST

January 27; February 3, 10, 17, 24; March 3, 24, 31; April 7, 14, 21, 28; May 5