

Spring 2024
Graduate Seminar Descriptions
Department of Political Science



PLSC 503

Multivariate Analysis for Political Research

Professor Christopher Zorn

This is the second (full) course in quantitative methods in Penn State's political science Ph.D. program. The course introduces students to regression-type models for the analysis of quantitative data and provides a basis of knowledge for more advanced statistical methods. The course assumes basic math literacy, including familiarity with probability theory, properties of estimators, rudimentary calculus, and linear algebra. The bulk of the course will focus on general models of the form $Y = f(XB) + e$, and will include discussions of the mathematical bases for such models, their estimation and interpretation, model assumptions and techniques for addressing violations of those assumptions, and topics related to model specification and functional forms. Under this general framework, we will also provide a very brief overview of regression models for binary, ordered, unordered, and event count variables.

Thursdays, 9:00 a.m. – 12:00 p.m.

075 Willard Building



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PLSC/SOC 518 (Crosslisted)

Survey Design II

Professor Eric Plutzer

Survey methodology is concerned with (a) collect data by asking people questions, and (b) aggregating those answers in ways that generate valid and reliable inferences about a population of individuals. This class focuses on data collection (PLSC/SOC 519 focuses on data analysis).

The majority of this seminar will focus on questionnaire design through the lens of the Total Survey Error (TSE) framework. Other topics will include survey research ethics, sample recruitment and panel study retention, survey experiments, and methods effects due to mode of data collection (face-to-face, telephone, pencil and paper, PC and mobile technologies).

Mondays, 6:00 p.m. –9:00 p.m.

207 Ford Building



Spring 2024
Graduate Seminar Descriptions
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PLSC/AFAM 544

Race and American Politics

Professor Ray Block

In this seminar, we will explore what race is, why it matters, and how it shapes attitudes, behaviors, policies, and institutions. While this is a political science course, the seminar draws ideas and insights from a broad array of disciplines in the social sciences and humanities. It demonstrates that an explicit consideration of race is needed to fully comprehend American politics. Students emerge from the course with an understanding of the scholarly approaches and key substantive debates.

Thursdays, 2:00 p.m. – 5:00 p.m.

371 Willard Building



Spring 2024
Graduate Seminar Descriptions
Department of Political Science



PLSC 550

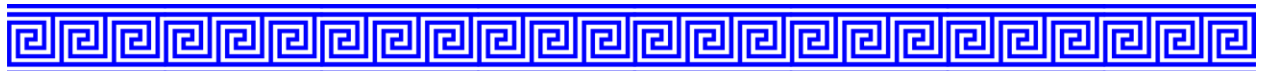
Theory and Methodology

Professor Daniel Tavana

This is the core seminar for the subfield of comparative politics in the Ph.D. in Political Science program. The course introduces students to the subfield, its intellectual evolution, and emerging questions and controversies. Throughout the semester, we will read and discuss both foundational theoretical work and more recent empirical research that applies existing theories to the developed and developing world. The primary goals of the course are to prepare students for a research career in comparative politics and to introduce doctoral candidates to the readings they will need to know for the comprehensive examination in comparative politics. The course will proceed thematically: each week we will discuss a subset of the relevant literature and focus our learning on a major theme, question, or debate. Important methodological approaches are addressed in the context of these substantive and theoretical works.

Tuesdays, 2:00 p.m. – 5:00 p.m.

236 Pond Lab



Spring 2024
Graduate Seminar Descriptions
Department of Political Science



PLSC 597.001

Diplomacy, Signaling & Coercion

Professor Roseanne McManus

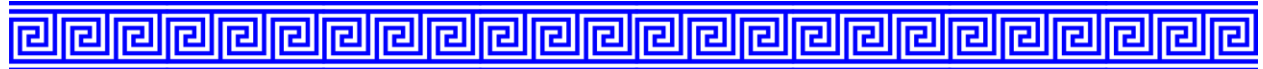
Interdisciplinary integration of computational, informational, statistical, visual analytic, and social scientific approaches to the creation of big social data. This course addresses computational, informational, statistical, visual analytic, and social scientific approaches to the creation of data that are both "social" (about, or arising from, human interactions) and big (of sufficient scale, variety, or complexity to strain the informational, computational, or cognitive limits of conventional social scientific approaches to data collection or analysis). Examples include text, image, audio, video, intensive spatial and/or longitudinal data, data with complex network, hierarchical and/or other relational information, data from distributed sensors and mobile devices, digitized archival data, and data exhaust from sources like social media. Possible topics include sources of social data, data structures and formats for social data, data collection and manipulation technologies, data linkage and alignment, ethics and scientific responsibility in human subjects research, experimental and observational data collection design for causal inference, measurement of latent social concepts, reliability and validity, search and information retrieval, nonrelational and distributed databases, and standards for data preservation and sharing.

Wednesdays, 9:00 a.m. – 12:00 p.m.

369 Willard Building



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PLSC 597.002

Causal Inference

Professor Giancarlo Visconti

This course will cover the design, implementation, and interpretation of statistical methods used for establishing causal relationships in political science. We will cover a variety of causal inference designs, including randomized, survey, and natural experiments, instrumental variables, regression discontinuity designs, difference-in-differences, and matching.

Wednesdays, 1:30 p.m. – 4:30 p.m.

294 Sackett Building



Spring 2024
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SoDA 501

Big Social Data: Approaches and Issue

Professor Bruce Desmarais

Interdisciplinary integration of computational, informational, statistical, visual analytic, and social scientific approaches to the creation of big social data. This course addresses computational, informational, statistical, visual analytic, and social scientific approaches to the creation of data that are both "social" (about, or arising from, human interactions) and big (of sufficient scale, variety, or complexity to strain the informational, computational, or cognitive limits of conventional social scientific approaches to data collection or analysis). Examples include text, image, audio, video, intensive spatial and/or longitudinal data, data with complex network, hierarchical and/or other relational information, data from distributed sensors and mobile devices, digitized archival data, and data exhaust from sources like social media. Possible topics include sources of social data, data structures and formats for social data, data collection and manipulation technologies, data linkage and alignment, ethics and scientific responsibility in human subjects research, experimental and observational data collection design for causal inference, measurement of latent social concepts, reliability and validity, search and information retrieval, nonrelational and distributed databases, and standards for data preservation and sharing.

Mondays, 9:00 a.m. – 12:00 p.m.

320 Sackett Building

