

Department of Political Science
Fall 2025
Seminar Description

PLSC 501

Methods of Political Analysis

Professor Daniel Tavana

This course introduces students to the logic that guides the social scientific study of politics. In contrast to PLSC 502, 503, and 504, which focus on the analysis of data, this seminar focuses on the fundamentals of social scientific inquiry, theory building, and research design that precede data analysis. In 2008, Donald Rubin coined a now ubiquitous phrase: “Design trumps analysis.” In this course, we’re going to think about what this means and why this is. The course will provide students with the tools necessary to 1) distinguish theories from facts and assertions; 2) derive testable and falsifiable hypotheses from theory; and 3) design research projects, conduct research, and communicate results. We will consider the components of good research design as we cover a variety of methods used in contemporary political science research. The course is designed to encourage students to think more deeply about their own research interests and improve their ability to evaluate the research of others. Topics include concepts and measurement, design in experimental and observational settings, qualitative methodology, survey sampling and selection, comparisons of small-N and large-N designs, and approaches to scientific inference.

Thursdays, 9:00 a.m. – 12:00 p.m.

123 Pond Lab

Department of Political Science
Fall 2025
Seminar Description

PLSC 502

Statistical Methods for Political Research

Professor Jared Edgerton

This course provides an introduction to the principles of probability and mathematical statistics. Here you will learn the foundational principles of statistics that will be important for any type of quantitative analysis you will do in the future. This includes topics such as probability, distributions, estimation, hypothesis testing, cross-tabulations, and linear regression. The material taught in this class will be important for understanding later classes in the methods sequence on regression and other topics.

Mondays, 1:25 p.m. – 4:25 p.m.

009 Sparks Building

Department of Political Science
Fall 2025
Seminar Description

PLSC 504

Topics in Political Methodology

Professor Bruce Desmarais

This is an elective course in statistical methods designed to meet the particular needs of students in the political science Ph. D. curriculum. PLSC 504 is tailored to focus on the specific issues that arise in the types of data found in political science applications. Students are expected to have completed the three required foundational courses in political methodology or their equivalents. This course examines a range of quantitative methods widely used in empirical political science that are beyond the scope of the core required methods courses. The specific methods covered vary over time. Common topics include, but are not limited to, the generalized linear model (e.g., binary logit and probit, Poisson regression); time-to-event (survival) data, panel data and time-series cross-sectional analysis, latent variable methods, multilevel models, text as data methods, network analysis, and methods for causal inference using observational data. Students will apply these methods in a series of homework assignments and an independent research project. Empirical political scientists must have familiarity with these methods; these techniques represent a baseline level of methodological competence necessary for those seeking to do advanced quantitative analysis in political science. The material in this course is technical, but students will be given an intuitive rationale for each method.

Wednesdays, 9:00 a.m. – 12:00 p.m.

370 Willard Building

Department of Political Science
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Seminar Description

PLSC 511

Professional Norms in Political Science

Professor Douglas Lemke

This course has three main related goals. The first is to help you get the most out of your graduate school experience. The second is to help prepare you for becoming an academic by improving your understanding of the profession. The third is to prepare you to be an effective and engaged teacher. To accomplish these goals, we will discuss how to make the most of the graduate school experience to make your job portfolio as strong as it can be. We will learn how to be an effective teacher and mentor inside and outside of the classroom by developing effective syllabi, preparing to teach diverse student populations, and tailoring class sections to meet student needs. Other topics will include diversity in the profession, strategies for effective conference attendance, and the responsible conduct of research.

Students will be expected to attend every session, participate in seminar discussions, and complete assignments. Grading for the course will be pass/fail.

Note: You should enroll in this course if you are entering the first semester of your first year. This is a required, 1.5 credit course.

Wednesdays, 1:30 p.m. – 3:00 p.m.

004 Deike Building

Department of Political Science
Fall 2025
Seminar Description

PLSC 513

Writing and Professional Development in Political Science

Professor Douglas Lemke

This course focuses on publishing research, writing theses and dissertations, communicating research, engaging other's research, how to work with an advisor and committee, and a variety of issues of the profession that academics must master in order to be successful during their graduate studies, in getting a job, and in their overall career. This course is designed with an emphasis on honing the M.A, forming testable research questions, and the basics of a research design. The course will give practical guidance on the profession, including learning to turn papers into published research, being a peer reviewer, presenting research publicly and navigating the job market. All members of the seminar are required to participate in every session, and provide constructive comments on their peers' work, both orally and in writing

Note: You should enroll in this course if you are entering your second year in the program. This course is the second of two required, 1.5 credit professional development courses in the graduate program in political science.

Mondays, 1:30 p.m. – 3:00 p.m.

118 Mateer Building

Department of Political Science
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Seminar Description

PLSC/SOC 519

Survey Methods II: Analysis of Survey Data

Professor Eric Plutzer

Cross-listed with Sociology

Data collected by surveys have a combination of qualities that represent challenges to valid inference. These include cluster and stratified sampling, under-representation of some groups due to differential response rates, missing data due to item non-response, and coarse measurement. We often use surveys to test theories that the original survey designer did not intend to address, raising issues of validity of measurement. At the same time, surveys offer a number of opportunities and, when combined with other surveys (pooled cross sections) or merged with contextual data, can address a wide range of theoretical puzzles in the social sciences. This intermediate-level course in applied social statistics provides an *introduction* to techniques in the survey analyst's toolkit: use of design weights, post-stratification weights, non-response adjustment, accounting for clustering and other features of the research design in analysis, merging surveys with other surveys or auxiliary data, and missing data imputation.

Mondays & Wednesdays, 6:00 p.m. – 7:30 p.m.

115 Susan Welch Liberal Arts Building

Department of Political Science
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Seminar Description

PLSC 540

American Politics: American Government and Politics

Professor Tracee Saunders

This course introduces graduate students to the core concepts and controversies in the study of American politics. We will discuss the evolution of research on American political institutions and behavior through discussions of both current and classic readings. We will consider both how these readings contribute to our knowledge of politics in the United States and how researchers designed and executed their studies.

This course has three central aims: to help students find feasible research questions that they can investigate throughout their graduate careers and to ready students for more advanced seminars in American political institutions and behavior.

Tuesdays, 9:00 a.m. – 12:00 p.m.

311 Boucke Building

Department of Political Science
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PLSC 551

Comparative Political Institutions: Political Parties

Professor Vineeta Yadav

This course explores political parties in comparative perspective using the tools of quantitative and qualitative social science. The primary goals of the course are to provide students with an overview of the field and to prepare students to conduct research on this topic. We will focus on the intellectual evolution of the field, canonical debates, and emerging questions and controversies. The course will proceed thematically: each week will cover a different research area. For each research area, we will focus both on foundational texts and recent research. This approach will encourage students to think critically about how innovative research design can generate new insights into key debates in comparative politics. Topics include typologies of parties, party functions, party strategies, political recruitment, intra-party politics, opportunities and constraints on party formation and competition, party institutionalization, party system change, dominant party systems, parties in autocracies, parties in coalitions and selected topics looking at the link between parties and outcomes in political economy and IR. Because student interest in different research areas varies, topics may change across semesters. Methodological questions central to the cross-national study of political parties will be introduced alongside these substantive research areas. We will examine studies of and evidence from developing and advanced democracies and autocracies.

Mondays, 9:00 a.m. – 12:00 p.m.

118 Mateer Building

Department of Political Science
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PLSC 560

International Relations: Theory and Methodology

Professor Xun Cao

This course is the field seminar in international relations, aimed at providing an introduction to major theories of international relations and exposing students to contemporary research in the field. In this seminar, you will learn to understand and evaluate critically academic literature in international relations, as well as become familiar with major themes in international relations research. We will discuss important theoretical approaches used in the study of international politics and explore the manner in which social scientific research is conducted. The broad overview of theories and research topics in this course should enable you to identify areas of interest that you can further pursue in subsequent graduate courses and in independent research. This course is designed for graduate students who are planning to pursue careers in international relations or political science research; we will not focus on current events or issues in particular world regions.

Thursdays, 1:30 p.m. – 4:30 p.m.

025 Burrowes Building

Department of Political Science
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Seminar Description

PLSC 597.001

Machine Learning

Professor Jared Edgerton

Political science research is now regularly conducted using data that is larger and more complex than the data for which conventional statistical tools were designed. Examples of such data include population-scale information on individual-level consumer and political behavior, data streams collected from social media, and archives of electronic government records. There are three fundamental ways in which fine-grained, voluminous, and high-dimensional data require a set of methods that are more flexible than the conventional toolkit of quantitative social science. First, the data is inherently more complex, making it difficult to specify an adequate statistical model from theory alone. Second, the data is high dimensional, meaning there are more variables than one can include in conventional statistical models. Third, the data contains adequate information to make accurate predictions about unseen data (e.g., forecasts). These three features demand a statistical toolkit that is capable of learning model structure, selecting variables, and producing accurate predictions, which are all capabilities of foundational machine learning methods. In this course, we will cover foundational machine learning, with a focus on application to problems in political science.

Wednesdays, 1:25 p.m. – 4:25 p.m.

001 Henderson Building

Department of Political Science
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Seminar Description

SODA 502

Approaches and Issues in Social Data Analytics

Professor Daniel DellaPosta

Addresses the interdisciplinary integration of computational, informational, statistical, visual analytic, and social scientific approaches to learning from 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). Includes alternative scientific models for learning from data (Bayesian inference, causal inference, statistical / machine learning, visual analytics, measurement modeling), analytics issues with big data (variable selection, parallel computing, algorithmic scaling, ensemble modeling, validation), analytics issues with particular structures and channels of social data (network data, geospatial data, intensive longitudinal data, text data), and issues of scientific responsibility and ethics in analysis of big social data.

Thursdays, 10:00 a.m. – 1:00 p.m.

421 Susan Welch Liberal Arts Building
