**SPRING 2018**

**PLS 802: Quantitative Techniques in Public Policy and Political Science II**  
Prof. Jacoby  
MW 12:40-2:00pm  
Linear and nonlinear models applied to public policy and political science data. Individualized research projects.

**PLS 809: Proseminar in Formal Theory**  
Prof. Houle  
Th 4:10-7:00pm  
Formal models in understanding politics. Topics may include game theory, spatial modeling, social choice theory, public choice theory, and dynamic modeling. Theoretical issues and research applications.

**PLS 821: State Government and Politics**  
Prof. Hall  
Tu 3:00-5:50pm  
This course surveys the field of state politics, especially studies of political institutions and political behavior using variations within and across states as an analytical device for testing hypotheses about the importance of context in American politics. We will discuss, among other things, the political development and redesign of institutions and their effects on processes and outcomes; citizen participation in the form of litigation, voting, and group activities to influence government; elite behavior, decision making, and processes within institutions; and inter-branch relations in a separation-of-powers system. These broader inquiries include a focus on the usual suspects: legislative, gubernatorial, and judicial elections; decision making in legislatures, statehouses, and supreme courts; political parties, interest groups, direct democracy, public opinion, political ideology, and political culture. This course should be of interest to students of American politics, state politics, public policy, and comparative research methodologies.

**PLS 870: Proseminar in Political Thought**  
Prof. Sebell  
Tu 6:00-8:50pm  
Survey of major issues or themes in political philosophy.

**PLS 900 Section 001: Applied Statistical Programming**  
Prof. Minhas  
Th 12:40-3:30pm  
Statistical computing is a quickly changing field. Standard techniques of today would have been difficult to execute fifteen years ago and impossible even in the late 1990s. Rapid improvements in computing power have been accompanied by swift changes in standard statistical methods. In just the last decade, techniques ranging from MCMC simulation, spatial, network, and text
analyses have moved from being novel, advanced applications to commonplace across the social sciences.

This class is designed to achieve two broad objectives. Broadly, this course aims to provide students some of the foundational concepts and skills needed to engage in modern statistical computing generally. No course can teach you everything there is to know about a language such as R or Python even as it exists today, and certainly no class can teach you every piece of software you will need to use in your career. Some of the tools that will be in wide use in ten years do not even exist today. Thus, this course aims to give you the more foundational meta-skills from computer science and statistics you need to teach yourself how to develop code or even software to execute specific tasks in R or similar computer languages. Learning at this level will also better equip you to understand software written by others. In addition, the course will introduce a few widely used computational methods common to statistics.

More narrowly, in the first iteration of this course, we will guide students as they learn the specifics of the R programming language, a powerful statistical computing environment widely used in the fields of statistics, political science, and machine learning. Achieving this goal will require students to learn commands, best practices, and work-arounds specific to the sometimes idiosyncratic R language.

The course will focus on helping students to understand the core concepts behind the R language, gain practical programming skills, and learn to apply both appropriately in a real-world setting. A major component of the course includes learning how to plan and execute a collaborative, complex programming project and how to effectively document and communicate the capabilities of the resulting software to others.

**PLS 900 Section 002: Multilevel Models**
Prof. Schibber
M 3:00-5:50pm
This course covers statistical modeling with explicitly defined hierarchies. Social scientists encounter multilevel data all the time: voters clustered in electoral districts, students nested within classrooms, legislators clustered in congressional periods, countries nested within regions, and so forth. Classic time-series cross-sectional (TSCS) data can also be thought as multilevel data, with observations clustered by unit and time period. Even in survey research, multilevel models are used to estimate public opinion across geographic units from individual-level survey data (commonly known as MRP). The course will begin with a review of linear regression, logistic regression, and generalized linear models. Then it will proceed to multilevel nested models and follow with non-nested models for linear and generalized linear models. Hierarchical modeling can incorporate individual-level predictors, group-level predictors, and individual-by-group (also known as cross-level) interactions. More than half of the course will feature a Bayesian perspective on inference and computation of hierarchical models. Prerequisites include courses on OLS, MLE, and knowledge of R.

**PLS 950: Comparative Political Economy**
Prof. Chang
Tu 9:10am-12:00pm
This course surveys both seminal and recent literature on comparative political economy, and focuses on the use of formal and empirical tools to address major issues at the intersection of politics and economics. The topical emphasis is on inequality, redistribution, and accountability. The objective is to acquaint you with seminal ideas and to help you identify research opportunities and/or narrow down your dissertation direction.

**PLS 960: Research Seminar in International Relations**  
Prof. Appel  
W 3:00-5:50pm  
Intensive study of one subfield of international politics. Critical evaluation of the literature.