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More than ever before, modern social scientists require a basic level of mathematical literacy, yet many students receive only limited mathematical training prior to beginning their research careers. This textbook addresses this dilemma by offering a comprehensive, unified introduction to the essential mathematics of social science. Throughout the book the presentation builds from first principles and eschews unnecessary complexity. Most importantly, the discussion is thoroughly and consistently anchored in real social science applications, with more than 80 research-based illustrations woven into the text and featured in end-of-chapter exercises. Students and researchers alike will find this first-of-its-kind volume to be an invaluable resource.

Jeff Gill is Associate Professor of Political Science at the University of California, Davis. His primary research applies Bayesian modeling and data analysis to substantive questions in voting, public policy, budgeting, bureaucracy, and Congress. He is currently working in areas of Markov chain Monte Carlo theory. His work has appeared in journals such as the *Journal of Politics*, *Political Analysis*, *Electoral Studies*, *Statistical Science*, *Sociological Methods and Research*, *Public Administration Review*, and *Political Research Quarterly*. He is the author or coauthor of several books including *Bayesian Methods: A Social and Behavioral Sciences Approach* (2002), *Numerical Issues in Statistical Computing for the Social Scientist* (2003), and *Generalized Linear Models: A Unified Approach* (2000).

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