Please join us for the Third Annual

Arizona Methods Workshops

January 3 - 8, 2013

Hosted by the Department of Sociology
University of Arizona, Tucson, AZ

Thursday, Friday, & Saturday, January 3-5

- Computer Simulation in Sociology
  James Kitts
- Geographic Information Systems
  Chris Lukinbeal
- Introduction to R
  Katerina Sinclair

Monday & Tuesday, January 7-8

- Managing Research Projects & Teams
  Jennifer Earl
- Social Network Analysis
  Joseph Galaskiewicz
- Advanced R
  Katerina Sinclair
- Introduction to Survey Design
  Jane Zavisca

Workshop Fees

Registration fee: $50 (non-refundable)
1 workshop - $350
2 workshops - $500
3 workshops - $600
50% student discount

www.sociology.arizona.edu/methods
for details, registration, and payment
Managing Research Projects and Teams
Professor Jennifer Earl

This workshop will examine key aspects of project and team management and is designed to help both young and experienced investigators. Young investigators will benefit from a thorough introduction to key features of project management such as hiring, training, evaluation, time management, and coordination, while more experienced investigators will be able to explore techniques for scaling up projects to accommodate large research teams, such as scalable training platforms (e.g., video-based training and computerized training modules) and communication and coordination platforms (e.g., project wikis, servers, and efficient collaborative tools in Google and other private providers).

Jennifer Earl is a Professor of Sociology at the University of Arizona. She taught at the University of California, Santa Barbara (UCSB) before joining Arizona. She is Director Emeritus of the Center for Information Technology and Society and Director Emeritus of the Technology and Society PhD Emphasis, both at UCSB. Her research focuses on social movements and the sociology of law, with research emphases on the Internet and social movements, social movement repression, and legal change. She is the recipient of a National Science Foundation CAREER Award for research from 2006-2011 on Web activism. She is also very interested in facilitating the professional development of younger colleagues, and has been involved in a number of mentoring programs. She has also managed a variety of projects, ranging from $1-2 million dollar projects with 15 team members at one time (and over 50 across the entire project).

Introduction to Survey Design
Professor Jane Zavisca

This workshop will cover the fundamental stages of survey design, and will emphasize how to design questionnaires appropriate for mass surveys using probability samples. The first part of the workshop will emphasize measurement; how to design questions that will result in variables appropriate for the concepts and models motivating a study. We will cover solutions to common problems in formulating questions, response options, and ordering of items and responses. The second part of the workshop will focus on sampling and implementation; we will cover the advantages and disadvantages of different approaches to drawing a probability sample, and the “design effects” (statistical and financial) of different types of samples; and procedures for conducting interviews, training staff, and maintaining quality control. Mornings will consist of lecture and discussion, and afternoons will include hands-on exercises related to questionnaire and sample design.

Jane Zavisca is an associate professor of sociology, with a decade of experience in survey design. Professor Zavisca has an MA in Statistics from Columbia University and a PhD in sociology from UC Berkeley. She also completed postdoctoral training in 2005-06 on latent variable models for the social sciences at the Statistical and Applied Mathematical Sciences Institute of the National Institute for Statistical Sciences. She designed and fielded a mass survey in Russia in 2001-2, and will be fielding a new survey in Russia, sponsored by the NSF, in 2012. Professor Zavisca has taught advanced graduate courses on research design for the past six years, and also has extensive training and experience in historical and qualitative methods as well. Her research concentrates on individuals’ attitudinal and behavioral responses to institutional economic change.

Social Network Analysis
Professor Joseph Galaskiewicz

Social network analysis (SNA) examines the patterned relationships among various social actors, e.g., people, groups, organizations, nation-states. This workshop introduces the main network concepts, e.g., social capital, structural holes, small worlds, structural equivalence, robust action, and methods used in the social sciences. The methods topics include data collection, issues in study design, measures on nodes (centrality), measures on networks (density, reachability), positional analysis (cliques, blockmodels), duality and affiliation networks (ties between two or more levels of analysis), dyadic analysis (QAP), dynamic network analysis (SONIA) and future prospects. This workshop is at the introductory level and is well suited for beginners in SNA. Participants are asked to bring their own laptops capable of running Windows programs.

Joseph Galaskiewicz is Professor of Sociology and has a courtesy appointment in the School of Government and Public Policy at the University of Arizona. He received his M.A. and Ph.D. degrees in Sociology from the University of Chicago. Professor Galaskiewicz edited Advances in Social Network Analysis: Research in the Social and Behavioral Sciences with Stanley Wasserman in 1994 (Sage Publications). He currently serves as a senior editor of the Management and Organization, and in 2008-09 he served as chair of the Organizations, Occupations, and Work Section of the American Sociological Association. He is also past President of the Association for Research on Nonprofit Organizations and Voluntary Action and a former Fulbright Scholar in Japan. He is currently working on several projects including an NSF funded study of the spatial distribution of establishments that provide services and activities on Saturday in the Phoenix metro area and the effect this has on what children do that day. Another project examines the ratification of environmental treaties by 166 countries from 1900 to 2008, using Friedkin and Johnson’s (1999) social influence models.

Introduction to R*
Advanced R**
Dr. Katerina Sinclair

*This workshop will be an overview of how to get data into R and conduct simple analyses, including diagnostic analyses and data cleaning, t-tests, ANOVAs, correlations, and simple regressions. Participants should have conducted these analyses before in other statistical packages as the instructor will not give in-depth reviews of statistical concepts.

**This workshop will build on the "Intro to R" workshop to demonstrate how to conduct advanced statistical analyses, including factor analysis, multiple and logistic regressions, generalized linear models, and mixed effects (multilevel) models. Participants should have conducted these analyses before in other statistical packages as the instructor will not give in-depth reviews of statistical concepts.

Dr. Sinclair is an enthusiastic supporter of R, which she has been using for over 6 years, mainly in the areas of time series analysis and hidden Markov modeling. She currently works as a Project Director and Statistical Consultant for the McClelland Institute for Children, Youth, and Families and the Southwest Institute for Research on Women at U of A. She earned a concurrent Masters of Applied Statistics and a PhD in Human Development and Family Studies, with a focus on research methodology and statistics, from the Pennsylvania State University. Participants should bring laptops with R already loaded (instructions will be sent before the workshop).

Geographic Information Systems
Professor Chris Lukinbeal

This introductory workshop will introduce the fundamental concepts of geographic information systems. Through hand-on exercises participants will develop basic software skill working ESRI’s ArcGIS software to visualize geographic data, create maps, query a GIS database, and analyze data using common analysis tools. We will also explore ESRI’s ArcGIS online and learn how to create web maps. Most of the workshop will be computer lab work though some contextual information will be presented.

Chris Lukinbeal is the Director of the Master of Science in Geographic Information Systems Technology program (MS-GIST) and Assistant Professor of the School of Geography and Urban Development at the University of Arizona. He has been involved with professional GIS education for over a decade, having developed and directed undergraduate and graduate GIS programs at three different universities and having chaired over 200 graduate students in GIS.

Modeling Emergence: Computer Simulation in Sociology
Professor James A. Kitts

The social world that we observe reflects a web of interdependent processes, with macro-level structures of organizations, communities, and societies both emerging from and constraining the micro-level interactions of individuals. A recent wave of research has used ‘computational experiments’ on agent-based models to elucidate, extend, integrate, and validate theories of social dynamics. This workshop will provide a hands-on orientation to sociological simulation methods and will introduce resources that allow participants to begin using simulation in their own work. Participants should bring laptop computers as they will have an opportunity to investigate sample models and begin exploring their own modeling ideas. No background in mathematics or computer programming is assumed, but the workshop will include readings and exercises.

James Kitts joined the Columbia University Graduate School of Business in 2007, having previously held positions in Sociology at Dartmouth and the University of Washington. He earned a 2001 PhD in Sociology from Cornell and a 1995 M.S. in Natural Resource Policy from Michigan. He has taught Ph.D. seminars in computational modeling at Columbia and UW, and has led modeling workshops around the world. He is broadly interested in the dynamics of cooperation and competition among organizations and among their members. He has studied the collective implications of communication biases in interaction networks, the dynamics of polarization, factionalism, and extremism in social influence networks, the demography and ecology of radical social movement organizations, and flows of patients exchanged among Italian hospitals. His work has recently appeared in American Sociological Review, Social Forces, Demography, and Social Psychology Quarterly.

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