**R. Karl Rethemeyer**
***Summary of Teaching Experience***

## Empirical Methods: Instructor (adjunct faculty) 2000-2001, Teaching Fellow 1997-2000

**Course title:** Advanced Empirical Methods (API 212)
**Professors:** R. Karl Rethemeyer/David A. Wise (2000-2001) David A. Wise (1997-2000)
**Content:** Advanced ordinary least squares regression; maximum likelihood techniques – instrumental variables, fixed and random effects regressions, panel data techniques, two stage least squares, probit/logit, conditional logit, multinomial logit, tobit, simulation modeling for analysis with qualitative dependent variables, Heckman correction for attrition and selection (two stage and full-information), social experiments and methods (natural experiments and randomized control trials), non-parametric differencing methods. Failure modes for these methods and techniques for detecting failures.
**Responsibilities:** 2000-2001: Twenty 90 minute lectures; creation/grading of final examination; assistance with and grading of final project (original empirical paper); office hours.
1997-2000: Twelve 90 minute review lectures; two course-end review lectures; draft questions for final examination; grading of final examination; office hours.

**Course title:** Empirical Methods II (API 202A)
**Professor:** Suzanne J. Cooper (1997-1998)
**Content:** Introductory ordinary least squares regression; program evaluation – Gauss-Markov conditions, univariate regression, multivariate regression, use of dummy and interacted variables, model specification issues, model failures, (multicollinearity, hetereoscedasticity, omitted variables, serial correlation, simultaneity, measurement error), model tests and corrections ($R^2$, t tests, F tests, Goldfeld-Quandt test, weighted least squares, robust standard errors, Durbin-Watson test, Cochrane-Orcutt procedure), introduction to experimental methods, introduction to qualitative dependent variables.
**Responsibilities** Twelve 90 minute review lectures; two course-end review lectures; draft questions for final examination; grading of final examination; office hours.

## Network Methods: Teaching Fellow (1999-2000)

**Course title:** Social Network Methods (Soc 275)
**Professor:** Peter V. Marsden
**Content:** Introductory and advanced network methods– graph theory (dyads, triads, paths, connectivity, etc.), centrality/centralization, subgroup cohesion (cliques, clans, etc.), data visualization, two mode networks, blockmodels and positional analysis (CONCOR, structural equivalence routines, etc.), cluster routines and models, networks & social capital/autonomy, statistical approaches to network (p* & $p_1$ models), diffusion and network effects models; use of UCINET, KRACKPLOT and other network analytic software packages.
**Responsibilities** Revision of seven project modules; review of student work on project modules; management of course web site; installation and management of specialized software; assistance with use of software; office hours; assistance with student final project (both technical and conceptual issues).