Please see the syllabus here.

Important note: Due to a recent change in the Government Department Graduate Quantitative Methods sequence, this year Gov2001 will cover causal inference. If you have already taken Stat286 or Gov2003 in the past several years, you should not enroll in this course. This means, however, that you can take this course even if you have taken Gov2001 in the past.

Prerequisites: Gov2002 or equivalent (i.e., basic probability, statistical inference, linear models, and R programming)

Course summary: Substantive questions in empirical scientific and policy research are often causal. Does voter outreach increase turnout? Are job training programs effective? Can a universal health insurance program improve peopleâ€™s health? This class will introduce students to both theory and applications of causal inference. As theoretical frameworks, we will discuss potential outcomes, causal graphs, randomization and model-based inference, sensitivity analysis, and partial identification. We will also cover various methodological tools including randomized experiments, regression discontinuity designs, matching, regression, instrumental variables, difference-in-differences, and dynamic causal models. The course will draw upon examples from political science, economics, education, public health, and other disciplines