PLSC 503: "Multivariate Analysis for Political Research"

Spring 2025

Course Project Guidelines

A requirement of this course is the completion of a *course project*. This research project is worth 50 percent of your grade in the course (that is, 500 points). The purpose of the project, in roughly descending order of importance, is to (a) illustrate your understanding of the statistical techniques covered in the class, including such issues as model specification, estimation, interpretation of estimates, and diagnostic procedures; (b) demonstrate the application of those techniques to a problem of substantive interest in the social sciences; and (c) address some political phenomenon in a quantitative fashion.

Your project can take on any of several forms:

- a short research paper,
- a conference poster,
- an application, or
- some other format.

If you choose to present your research as a paper, its form should be akin to that of a research note, as are commonly published in some social science journals (e.g., "short articles" at the *Journal of Politics*, "research notes" at *Social Psychology Quarterly*, etc.). Total length should not exceed 5000 words of text (that's about 15 pages), but feel free to include as many references, tables and figures as you deem necessary.

If you prefer to present your work as a poster, there are resources to help you create one on the course github repository. Applications (apps) may be self-contained or (preferably) web/browser-based, and can be created using (e.g.) the shiny package in R. For other project formats, please consult with (and receive permission from) the course instructor.

Irrespective of its format, several general approaches to the course project are possible. Your project may be a replication and extension of previously published work, a retesting of previously examined hypotheses on new or different data, or a piece of completely original research. In any event, the primary goal of the project is methodological, not substantive. This means that emphasis should be placed on the technical aspects of the analysis. Some traditional components of a research project, including a literature review, theoretical context, and derivation of expectations and hypotheses should be included only to the extent that they are necessary to understand and evaluate the analysis' statistical merits. Conversely, technical details, including descriptives, diagnostics, alternative model specifications, robustness checks, and so forth, which might normally be omitted from a final paper or poster, should be included here. In all cases, the emphasis should be on demonstrating technical mastery of the practical aspects of the technique you use, by describing the details of the process by which the analysis was conducted.

While you are welcome to collect your own data for the project, time and effort constraints will very likely make doing so infeasible, and you are encouraged to coopt others' data to your own ends; on that point, be aware that many researchers make their data available on their personal homepages and/or via the Dataverse Project. Your project is due at 11:59 p.m. EST on Wednesday, May 7, 2025; please plan accordingly. Finally, if you have questions about the project, feel free to talk to the instructor, either in person or via phone, e-mail, etc.