Teaching Statement

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As someone teaching statistics to social science majors. I design courses with two principles in mind. First, students need flexibility to engage with the course on their own terms and focus on the content they find useful. For example, the flipped classroom lab sessions in my course on data analysis for public opinion and policy asks students to evaluate a research design, suggest alternatives or modifications, and to evaluate its statistical properties through coding and writing. Some students may propose increasing the sample size, sampling from a different underlying population, or changing the assignment of treatment conditions. This allows students to pursue the tasks that suit their interests and gives me the freedom to reward creativity and effort over correctness.

The second principle is accountability, which is necessary to keep everyone on task while allowing flexibility. This means agreeing on an overarching theme that every single course activity must relate to. For example, early on my data analysis course, I introduce the bias-variance tradeoff as a principle to choose among alternative research designs. So, while students are free to propose any modification to an existing research design that they deem appropriate, they are also required to document the explicit or implicit costs that would come from their proposal. They must consider, for instance, that a representative sample is more expensive than a convenience sample, or that implementing a block-randomized experiment may require access to variables that cannot be measured easily.

Flexibility and accountability also help in preventing instances of discrimination in the learning process. Through flexibility, students are invited to add value to the course by bringing their own perspective, knowledge, or experiences. In turn, accountability sets the scope for the type of contributions of interventions that are admissible. From this perspective, a racist remark is unacceptable not because someone disagrees with it, but because it is beyond the scope of the course vocabulary.

I am prepared to teach courses on statistical inference, statistical programming, causal inference, machine learning, and their application to social science and public policy. Please refer to my CV or website for additional information on my teaching experience and sample syllabi.