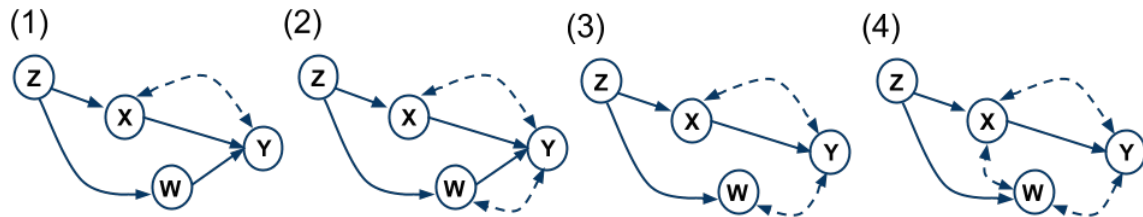# STP 598 (CLASS 24770): CAUSAL INFERENCE
INSTRUCTOR: P. RICHARD HAHN

MW 4:35 - 5:50PM WXLR A109

Internet know-it-alls like to say "correlation doesn't imply causation". That's like saying "we don't know for certain that the sun will rise tomorrow": it might be true, but it's intellectually lazy. In fact, under certain conditions, correlation *does* imply causation. Randomized experiments are one case, but there are others, too. Take this class and learn more about these lesser known cases. It will make your data analysis skills more relevant to real problems, and you can knowledgeably tell the trolls to grow up. And if *you* are one of those internet know-it-alls, then you *definitely* should take this class.

Topics will include:
- Potential outcomes framework (Rubin)
- Causal diagrams (Pearl)
- Structural equation models
- Randomized controlled trials
- Regression approaches
- Instrumental variables
- Regression discontinuity design
- Difference-in-difference estimation