

Syllabus

Policy Evaluation Methods			
Responsible:			
Patrick Schneider, Chair of Labour Economics			
Program:	Type:	Term:	ECTS:
Master	Lecture & Paper Sessions	Summer	5/6 CP
Contents & Objectives:			
<p>This course offers an introduction to the fundamentals of causal inference and to widely used research designs in the social sciences. In the first part a framework for understanding causality is introduced. Specifically, the epistemological differences between association, intervention and counterfactuals are explained. Then it is shown why experiments are paramount in generating causal knowledge and which assumptions are needed for which level of the causal hierarchy. Finally, we will discuss two widely used approaches to causality in the social sciences, i.e. potential outcomes and directed acyclic graphs.</p> <p>The second part is devoted to the research designs regressions analysis, difference-in-differences, instrumental variables, and regression discontinuity. The emphasis is how these research designs are for example applied to answer important questions in labor economics such as the effects of a minimum wage increase on employment or the effect of children on female labor supply and wages.</p> <p>The assumptions each research design requires in order to identify a causal effect will be at center stage of the lecture. Therefore the emphasis is to teach students <i>what</i> one needs to estimate in order to answer a given question. Further, the research designs are discussed such that students will be able to evaluate and apply these research designs to other questions and fields.</p> <p>After the course, students should be able to understand the basic concepts and methods of causal inference; should be able to read and interpret research and judge its credibility. This course furthermore serves as a basis for subsequent master courses on statistical inference and estimation, i.e. on <i>how</i> to estimate.</p>			
Prerequisites:			
No prerequisites are required.			
Course Structure:			
Week	Content		
1-2	Introduction and Causality		
3-4	The Experimental Ideal and Directed Acyclic Graphs		
5	Regressions		
6-7	Difference-in-Differences		
8-10	Instrumental Variables		
11-12	Regression Discontinuity		
Literature: Pearl, J., M. Glymour and N. P. Jewell (2016). Causal Inference in Statistics: A Primer			
Angrist, J. D. and J.-S. Pischke (2009). Mostly Harmless Econometrics: An Empiricist's Companion. Princeton University Press			
Cunningham, S. (2021). Causal Inference: The Mixtape. Yale University Press			
Lecture notes will be provided.			
Grading:			
Grading will be based on a term paper and a presentation.			
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