Georg-August-Universität Göttingen	6 C
Module M.WIWI-VWI .0138: Quasi-Experiments in Development	3 WLH
Economics	
 Learning outcome, core skills: Understanding of the counterfactual problem and critical assessment of sources and causes of endogeneity bias, deep understanding of quasi-experimental estimation strategies and their identifying assumptions, critical reading and reviewing of scientific articles that apply quasi-experimental techniques, conduct of data analyses using quasi-experimental research designs, ability to design and draft own research ideas that apply quasi-experimental identification strategies. 	Workload: Attendance time: 42 h Self-study time: 138 h
Course: M.WIWI-VWL.0138.Lec Quasi-Experiments in Development Economics (Lecture) Contents: The course deals with common quasi-experimental approaches for measuring causal effects in developing economics. The content focuses on the distinction between correlation and causality and provides students with a statistical toolkit which will allow them to plan and conduct their own independent research. The lecture starts off with a theoretical foundation of the counterfactual problem and how randomized controlled trials (RCTs), considered the gold standard, solve the counterfactual problem. Special attention is paid to endogeneity caused by omitted variables, reverse causality and measurement error. The main part of the course deals with common quasi-experimental approaches to causal effect identification, including difference-in-differences and fixed effects estimation, instrumental variables estimation, regression discontinuity design and matching design. The course further deals with standard error issues inherent to specific methods and their solutions as well as issues with multiple hypotheses testing. In the lecture, special attention is paid to the specific assumptions necessary for each quasi- experimental technique to measure causal effect and common threats to identification (such as selection bias). This is discussed based on a theoretical framework as well as at examples from the literature.	2 WLH
Course: M.WIWI-VWL.0138.Ex Quasi-Experiments in Development Economics (Exercise) <i>Contents</i> : In tutorials, students learn how to use quasi-experimental techniques in a very practical manner through exercises in Stata and critical reading and reviewing of scientific articles.	1 WLH
 Examination: Written examination (90 minutes) M.WIWI-VWL.0138.1: Quasi-Experiments in Development Economics Examination requirements: Comprehensive theoretical knowledge of quasi-experimental methods and their identifying assumptions, 	3 C

 deep understanding of the distinction between correlation and causality, ability to critically assess different biases and threats to internal validity, knowledge of practical implementation of methods, understanding of standard error issues and knowledge of dealing with them, understanding of the literature discussed in lectures and tutorials, ability to design evaluation recommendations based on a given situation. 	
 Examination: Practical examination (max. 10 pages) M.WIWI-VWL.0138.Mp: Quasi-Experiments in Development Economics Examination requirements: Ability to summarize and outline the key points of a scientific article, ability to critically assess violations to identifying assumptions of quasi-experimental techniques applied in the literature, knowledge of standard tests to demonstrate internal validity of quasi-experimental methods, practical implementation of quasi-experimental methods in Stata, critical review of own data analysis . 	3 C
Examination requirements:	

In general:

- Comprehensive theoretical and practical understanding of causal identification and the major methods,
- practical implementation with Stata.

Admission requirements: none	Recommended previous knowledge: Basic understanding of statistics, econometrics, and Stata or willingness to acquire these skills as part of the course.
Language:	Person responsible for module:
English	Prof. Dr. Sebastian Vollmer
Course frequency:	Duration:
each summer semester	1 semester[s]
Number of repeat examinations permitted:	Recommended semester:
twice	1 - 2
Maximum number of students: not limited	