Swiss Leading House VPET-ECON

A Research Center on the Economics of Education, Firm Behavior and Training Policies



University of Co-Director Zurich^{uz#} Prof. Dr. h.c. Uschi Backes-Gellner

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UNIVERSITÄT BERN Co-Director Prof. Dr. Stefan C. Wolter

Spring Term 2024

Leading House Ph.D. Course Econometric Methods in Economics of Education - Syllabus –

Lecturer:	Prof. Dr. Guido Schwerdt; University of Konstanz	
Workshop dates:	February 26 - March 1, 2024	
Location:	University of Zurich, Room tba	
Preliminary Schedule:	The lectures take place in the form of an intensive 5-day course.	
	Monday, Feb 26, 2024: Tuesday, Feb 27, 2024: Wednesday, Feb 28, 2024: Thursday, Feb 29, 2024: Friday, March 1, 2024:	13:30-17:30 08:30-17:30 08:30-17:30 08:30-17:30 08:30-17:30 08:30-12:30
Module Number; ECTS:	tba; 3 ECTS	
Course webpage:	https://www.educationeconomics.uzh.ch/en/Lehre/Courses.html	

Course overview

The purpose of this course is to familiarize participants with econometric methods and models for empirical work in education economics. Topics include regression analysis, models for panel data, instrumental variables estimation, and regression discontinuity designs. Hands-on exercises using Stata focus on the human capital production function and the determinants of, and returns to schooling.

Topics / Content

I. Regression Framework

Regression anatomy; causality; inference; discrete dependent variables

- II. Panel Data
 - Fixed effects; difference-in-differences
- III. Instrumental Variable Estimation

Standard IV; control function; Wald estimator; local average treatment effects, IV pitfalls

IV. Regression Discontinuity Designs

Fuzzy RD, sharp RD; RD pitfalls

www.economics-of-education.ch

Leading House VPET-ECON A Research Programme of the State Secretariat for Education, Research and Innovation

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Key literature

- Angrist, Joshua D., Jörn-Steffen Pischke (2009). Mostly Harmless Econometrics: An Empiricist's Companion.
 Princeton, NJ: Princeton University Press.
- Schlotter, Martin, Guido Schwerdt, Ludger Woessmann (2011). Econometric Methods for Causal Evaluation of Education Policies and Practices: A Non-Technical Guide. Education Economics 19 (2): 109-137.

Target audience and preconditions for participation

The course is particularly designed for doctoral students in economics of education. Doctoral students in economics or business economics with a strong interest in econometric analyses in economics of education are welcome as well.

Credit requirements and grading

- 1. Full course attendance is required to receive ECTS-Points. Students are expected to come prepared to the course. It will facilitate discussions and improve overall learning. Course materials will be sent to participants ahead of time.
- 2. Individual take-home exam

Application

The number of participants is limited. Course registration until **January 10, 2024**, is mandatory. Please send your application (including a one-page CV) to Chiara Zisler (<u>chiara.zisler@business.uzh.ch</u>)

WWF Statutory Course Policies

According to WWF study regulations, all exam dates are final as published in the VVZ and syllabus. This means that the final exam date is not negotiable. It will not be possible to take any exams on different dates. Academic dishonesty in any form will not be tolerated. Anyone caught cheating or engaging in unethical behavior will be reported to the Dean's office according to the guidelines on academic dishonesty set forth by the University of Zurich.

The information in this syllabus supports the official information in the electronic university registration tool (VVZ – Vorlesungsverzeichnis). In cases of doubt, the official information at the VVZ is decisive. For UZH students: Don't forget to officially register using the registration tool of the University of Zurich.

Any work presented by students only uses aids that are declared. Students accept full liability for the scientific integrity irrespective of potential use of generative AI tools such as ChatGPT. All instances of direct quotes or paraphrasing from published or unpublished sources are properly attributed. All work, in its current form or any similar version, has not been previously submitted, in whole or in part, as part of any other examination.