Swiss Leading House VPET-ECON

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

University of Zurich[UZH] — **Co-Director**
Prof. Dr. Dr. h.c. Uschi Backes-Gellner

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

Spring Term 2026

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

Lecturer:	Prof. Dr. Jens Ruhose; Kiel University
Workshop dates:	March 23 – 27, 2026
Location:	University of Zurich, KOL-G-212 (Mon-Tue); KAB-E-05 (Wed-Thu); RAK-E-6 (Fri)
Preliminary Schedule:	The lectures take place in the form of an intensive 5-day course.
	Monday, Mar 23, 2026: 13:30-17:30 Tuesday, Mar 24, 2026: 08:30-17:30 Wednesday, Mar 25, 2026: 08:30-17:30 Thursday, Mar 26, 2026: 08:30-17:30 Friday, Mar 27, 2026: 08:30-12:30
Module Number; ECTS:	03SMDOEC0716; 3 ECTS
Course webpage:	http://www.business.uzh.ch/de/professorships/emap/teaching.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 and vocational training.

Topics / Content

I. Regression Framework
  Regression anatomy; causality; inference
II. Experiments
  Internal and external validity
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
V. Panel Data
  Fixed effects; difference-in-differences

---

www.economics-of-education.ch
Leading House VPET-ECON
A Research Programme of the State Secretariat for Education, Research and Innovation

Prof. Dr. Dr. h.c. Uschi Backes-Gellner
University of Zurich, Department of Business Administration, Plattenstr. 14, CH-8032 Zürich
Tel. +41 44 634 42 81, backes-gellner@business.uzh.ch

Prof. Dr. Stefan C. Wolter
University of Bern, Department of Economics, Centre for Research in Economics of Education,
Schanzeneckstr. 1, Postfach 8573, CH-3001 Bern
Tel. +41 31 631 36 56, stefan.wolter@vwi.unibe.ch

Student presentations

All participants are encouraged to give a short presentation of about 10 minutes on a research idea or project.

Key literature

- Angrist, Joshua D., Jörn-Steffen Pischke (2009). *Mostly Harmless Econometrics: An Empiricist's Companion.* Princeton University Press.
- Cuningham, Scott (2021). *Causal Inference: The Mixtape.* Yale University Press. (https://mixtape.scunning.com/)

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 **February 2, 2026**, is mandatory. Please send your application (including a one-page CV) to Chiara Zisler (chiara.zisler@business.uzh.ch).

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.