

# Swiss Leading House

## Economics of Education, Firm Behaviour and Training Policies



Co-Director  
Prof. Dr. Uschi Backes-Gellner



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

Fall Term 2019

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

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| <b>Lecturer:</b>             | Prof. Dr. Guido Schwerdt; University of Konstanz  |
| <b>Workshop dates:</b>       | September 9-13, 2019  |
| <b>Location:</b>             | University of Zurich, Room tba  |
| <b>Preliminary Schedule:</b> | The lectures take place in the form of an intensive 5-day course.<br>Monday, Sept. 9, 2019: 13:30-17:30<br>Tuesday, Sept. 10, 2019: 08:30-17:30<br>Wednesday, Sept. 11, 2019: 08:30-17:30<br>Thursday, Sept. 12, 2019: 08:30-17:30<br>Friday, Sept. 13, 2019: 08:30-12:30 |
| <b>Module Number; ECTS:</b>  | tba; 3 ECTS   |
| <b>Course webpage:</b>       | <a href="http://www.business.uzh.ch/de/professorships/emap/teaching.html">http://www.business.uzh.ch/de/professorships/emap/teaching.html</a>   |

#### 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](http://www.economics-of-education.ch)

The Swiss Leading House on "Economics of Education, Firm Behaviour and Training Policies"  
A Research Programme of the State Secretariat for Education, Research and Innovation SERI

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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 **August 01, 2019**, is mandatory. Please send your application (including a one-page CV) to Fabienne Kiener ([fabienne.kiener@business.uzh.ch](mailto:fabienne.kiener@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.