



## Spring Term 2015

### Leading House PH.D. Course Natural Experiments for causality analysis in economics of education - Syllabus -

**Lecturer:** Prof. Dr. Dinand Webbink, Erasmus School of Economics Rotterdam; Tinbergen Institute; CPB; IZA, Bonn; ROA, Maastricht.

**Workshop dates:** May 04-08, 2015

**Location:** University of Zurich, Room tba

**Preliminary Schedule:** The lectures take place in the form of an intensive 5-day course.

Monday, May 04: 13:30-18:00

Tuesday, May 05: 09:00-18:00

Wednesday, May 06: 09:00-18:00

Thursday, May 07: 09:00-18:00

Friday, May 08: 09:00-12.00

**Module Number; ECTS:** tba; 3 ECTS

**Course webpage:** tba

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### Course overview

In the last two decades a wave of new studies has emerged on the effects of educational interventions on student performance. These studies exploit exogenous variation in interventions in education produced by controlled or natural experiments. This new approach for identifying causal effects in education has recently been labelled as “the credibility revolution” in econometrics. The aim of this course is to familiarize students with the main methods from this approach for obtaining credible estimates. Topics include randomized experiments, instrumental variables, regression discontinuity models, difference-in-differences models and matching models. These methods will be discussed and applied using many examples from the recent literature. By the end of the lectures students should have a firm grasp of the type of research designs that can lead to convincing analysis. In addition, they should be able to assess the credibility of empirical research projects. The course comprises eight units: The sessions consist of a combination of teaching, students’ presentations and discussions.

### Key literature

Angrist, J.D and J Pischke, (2010) The credibility revolution in empirical economics: How better research design is taking the con of out econometrics, *Journal of Economic Perspectives*, 24 (2), 3-30.

Cameron, C. and P. Trivedi (2006), *Microeconometrics*, chapter 25.

Webbink, D., 2005, Causal effects in education, *Journal of Economic Surveys*, 19 (4), 535-560.

Selected articles from the recent literature on the economics of education.



## **Target audience and preconditions for participation**

The course is particularly designed for doctoral students in the course program on economics of education of the Swiss Leading House. Doctoral students in economics or business economics with a strong interest in experiments for causality analysis in economics of education are welcome as well. The seminar will take place en bloc in order to enable external Ph.D. students to attend.

## **Credit Requirements**

1. Full course attendance.
2. During the course recent applications of the new methods will be discussed. Students will be asked to present the main lines of an assigned paper or to prepare a short discussion on the research design applied in the paper. Students should prepare presentations which last 10 to 15 minutes. Presentations should be analytical and critical, rather than just descriptive. Students are asked to point out or give a view on inconsistencies, problems or weaknesses of the papers such as confounding factors, whereas the presentations should focus on the methodological approach.
3. Students will also be given several assignments for analysis of data. The assignments will consist of replications of the analysis from recent examples from the literature using the original data.
4. At the end of the course students will be asked to write an assessment of the credibility of two proposals for investigating the causal effect of interventions in education. For each proposal a report is expected of approximately 2 or 3 pages. The reports should be sent within 3 weeks after the end of the course.

## **Application**

The number of participants is limited. Please send your application including a short CV to Curdin Pfister (curdin.pfister@business.uzh.ch) at the latest by **February 28, 2015**. For further details and questions please contact Curdin Pfister.

## **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.