PhD Course

**Applied Econometrics for Business and Economics**

**Dates & Time:**
- April 6 & 7, 2020 (10:00 am – 3:30 pm)
- April 8 & 9, 2020 (10:00 am – 3:00 pm)

**Location:**
- April 6 & 7: Moorweidenstraße 18, Room 0005
- April 8: Moorweidenstraße 18, Room 0029
- April 9: Moorweidenstraße 18, Room 0005

**Course Instructor:**
Prof. Dr. Ignacio Requejo (University of Salamanca, Spain)

**Teaching Language:**
English

**Credit Points:**
2 SWS / 5 LP

**Registration:**
until March 31, 2020. A maximum of 20 participants will be accepted (first come, first-served). Please, send an e-mail to Ignacio Requejo (irequejo@usal.es) indicating “Applied Econometrics for Business and Economics” in the subject line and providing the following details in the main body of the email:
- Name
- Email address
- Topic of doctoral thesis
- Background (e.g., field(s) of BSc / MSc degree(s))

**Course Overview:**
The course will provide students with the knowledge and tools that are necessary for applied empirical research in business and economics. It will start in the first part with an introduction to the econometric method and a description of the different data structures. The second part focuses on regression analysis with cross-sectional data, including the simple regression model and multiple regression analysis. The final part of the course deals with more advanced techniques frequently used in empirical research, such as some panel data methods and instrumental variables estimation, some of which enable applied researchers to account for various en-
dogeneity sources. Throughout the course, examples from the business and economics literature will be provided to illustrate the challenges faced in applied work and several data sets will be used in Stata software.

**Course Contents:**

The following is a tentative list of topics to be covered:
- The Nature of Econometrics and Economic Data
- The Simple Regression Model
- Multiple Regression Analysis: Estimation and Inference
- Multiple Regression Analysis: OLS Asymptotics and Further Issues
- Heteroskedasticity
- Advanced Panel Data Methods
- Instrumental Variables Estimation

**Organizational Matters:**

Course materials (slides and data sets) as well as all mandatory class reading assignments (not the textbooks) will be provided by e-mail and/or on paper. All files will be protected with a password which will be announced in class.

Given that applied work will be conducted during the sessions, it is advisable to bring your own laptop and make sure that you have access to Stata software. The University of Hamburg provides access to this program to the UHH community. Details on how to install and use Stata in your personal laptop/PC are available in the following link:

[https://www.rrz.uni-hamburg.de/services/software/software-thematisch/statistik/stata.html](https://www.rrz.uni-hamburg.de/services/software/software-thematisch/statistik/stata.html)

For any query on how to install and/or how to be able to use Stata in your personal laptop/PC, please, contact the IT Department of the University of Hamburg. If you have any question regarding the topics covered in the course or regarding the related literature, do not hesitate to ask the instructor during the sessions.

**Literature:**

*Mandatory Textbook*


*Other Recommended Textbooks*


**Selection of Articles**


**Who Should Attend:**

First-year PhD students with interest in empirical research. Some prior knowledge of basic probability and statistics is advisable, but not essential. Given that this is an introductory course, no previous expertise in programming and empirical research is necessary.

**Assessment:**

Participants will be required to hand in a work assignment and to make a presentation the last day of the course. The assignment will consist in a discussion of his/her own empirical analysis and/or of a published paper. The exact task will be agreed with the instructor the first day of the course. The written assignment and oral presentation, as well as the active participation of the student during the sessions, will be the criteria for the final grade.