



RUPRECHT-KARLS-UNIVERSITÄT HEIDELBERG
ALFRED-WEBER-INSTITUT FÜR
WIRTSCHAFTSWISSENSCHAFTEN
Professur für Empirische Wirtschaftsforschung
Prof. Dr. Christian Conrad

Winter term 2022/23

Advanced Econometrics

Lecture	Tue	9:00 a.m.	12:00 a.m.	HEU II
Tutorial	Wed	9:00 a.m.	11:00 a.m.	Neue Uni HS 09
Tutorial	Thu	4:00 p.m.	6:00 p.m.	Neue Uni HS 09

First lecture: 18.10.2022

Description:

The course is a compulsory module for students in all five M.Sc. Economics tracks. The lectures and tutorials will be held in person.

The module provides an introduction to econometric methods for analyzing cross-sectional, panel, and time series data. Students will develop knowledge and skills in applying econometric methods to analyze economic data using econometric software. Further information is available on the Moodle course page.

Before the start of the lecture period, we offer a three-day “Prep Course in Econometrics”. The prep course will be held in a hybrid format. The course covers basic concepts of statistics, probability theory, and matrix algebra. For details see [here](#).

Content:

1. The Linear Regression Model
2. Instrumental Variables Regression
3. Models for Panel Data
4. Experiments and Quasi-Experiments
5. Microeconometrics
6. Big Data
7. Time Series Regression
8. Carrying Out an Empirical Project

Course language: English

Transcript of records:

Your grade for this course will be determined in a final exam but you can earn extra credit by completing homework assignments.

Literature:

Angrist, J.D., Pischke, J.-S., 2015. *Mastering 'Metrics': The Path from Cause to Effect*. Princeton University Press.

Angrist, J.D., Pischke, J.-S., 2009. *Mostly Harmless Econometrics. An Empiricists Companion*. Princeton University Press.

Cunningham, S., 2021. *Causal Inference: The Mixtape*. Yale University Press.

Greene, W. H., 2012. *Econometric Analysis*. Pearson.

Hansen, B. (2021). *Econometrics*.

Hayashi, F., *Econometrics*, 2000. Princeton University Press.

Stock, J. H., Watson, M. W., 2020. *Introduction to Econometrics*. Pearson.

Wooldridge, J. M., 2010. *Econometric Analysis of Cross Section and Panel Data*. MIT Press.

Wooldridge, J. M., 2019. *Introductory Econometrics*. Cengage Learning.