

# 040693/1 Introduction to Applied Econometrics

Dr. Mario Holzner

*The Vienna Institute for International Economic Studies (wiiw), Rahlgasse 3, 1060 Wien, Austria*

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## Abstract

The course introduces the main workhorse of applied empirical research in economics, linear regression by ordinary least squares (OLS). After having taken the course, students should understand and be able to evaluate applied analysis of cross-section data and be able to undertake such analysis themselves. The main output shall be a group project or an independent research paper on a data set of own choice. The course is offered in parallel to Prof. Kunst's theoretical seminar 040131.

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**Time:** Thursday, 06:30 PM - 08:30 PM, weekly, October 2009 - January 2010

**Place:** University of Vienna, Dept. of Economics, Hohenstaufengasse 9, 1st floor, seminar room 2

**Start:** First meeting on the 8th of October 2009

**Interaction:** English language of instruction; Office hours on appointment; [www.shadoweconomics.org](http://www.shadoweconomics.org)

**Textbooks:** James H. Stock, Mark W. Watson: Introduction to Econometrics: International Edition, 2/E, Publisher: Pearson, 2007; ISBN-10: 0321442539; Or: Ramu Ramanathan: Introductory Econometrics with Applications, 5th Edition, Publisher: Cengage, 2002; ISBN-10: 0030343429

**Tool:** If possible take a laptop along with the Analysis Toolpak add-in installed in Excel

**Assessment:** Participation in class (25 points), take-home exercise (25 points), group project or independent research paper (50 points) to be handed in in written form and to be presented at the end of the term. A minimum of 51 points is needed for a positive evaluation.

**Outline:** Review of probability and statistics; How to find and handle economic data; Linear regression with one regressor; Doing regressions in Excel; Linear regressions with multiple regressors; Introduction to the general-purpose statistical software package STATA; Nonlinear regression functions; Assessing statistical studies; Introduction to panel data, binary dependent variable and instrumental variable regressions; Estimation of popular economic models such as the Cobb-Douglas production function; Introduction to L<sup>A</sup>T<sub>E</sub>X; Presentation and discussion of the group projects and independent research papers.

**Motto:** There are two things you are better off not watching in the making: sausages and econometric estimates. (Edward Leamer)

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*Email addresses: [holzner@wiiw.ac.at](mailto:holzner@wiiw.ac.at) (Dr. Mario Holzner)*