

- Faculté des sciences économiques
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Empirical methods for economists (5ER1022)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Bachelor en sciences économiques, orientation comptabilité/finance	Cours: 4 ph	écrit: 2 h	6
Bachelor en sciences économiques, orientation économie politique	Cours: 4 ph	écrit: 2 h	6
Bachelor en sciences économiques, orientation management	Cours: 4 ph	écrit: 2 h	6
Bachelor en sciences économiques, orientation ressources humaines	Cours: 4 ph	écrit: 2 h	6
Bachelor en sciences économiques, orientation systèmes d'information	Cours: 4 ph	écrit: 2 h	6

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

Période d'enseignement:

- Semestre Printemps

Equipe enseignante:

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homepage <http://www.unine.ch/irene>

Objectifs:

Important Note: The language of instruction of this course will be English!

The objective of this course is to learn how to apply basic techniques of econometrics in order to approach empirical research questions. Each theory session combines recapitulating an important theoretical econometric model with discussing a published article where this technique has been applied. Sessions are therefore highly interactive and depend heavily on students' active participation. This includes, but is not limited to, reading the assigned articles in advance and contributing during the discussion. Articles are selected primarily based on the econometric technique they apply.

Seminar sessions (called "laboratory sessions" or simply "lab sessions") will complement the theory sessions. Lab sessions will take place in one of the University's computer pools. During these sessions students will learn how to apply econometric techniques to real data using the software package Stata.

At the end of the course, students will apply their accumulated knowledge in order to carry out their own empirical research project. Therefore, they will:

- 1) Define a research question, which can be answered using econometric methods.
- 2) Collect and process data, required to answer the research question.
- 3) Identify and apply an econometric technique suitable for the collected data and the underlying research question.
- 4) Provide a meaningful interpretation of the results obtained from the application of the chosen econometric technique.
- 5) Present the results in the context of economic theory and prior empirical findings. The format of this presentation will be an article-style essay, no longer than 10 pages.

Contenu:

The main econometric techniques that will be discussed cover (among others):

- Ordinary Least Squares Regression (OLS)
- Basics of Panel Analysis
- Discrete Choice Models
- ...

Forme de l'évaluation:

The students' achievements will be graded according to the following scheme:

• Active participation and completion of exercise series (20%)

• Final written exam (duration: 2h) during the exam session at the end of the semester (40%)

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• Individual research project (40%)

For the re-take exam, the results obtained from the exercise series and the individual research project are not taken into account:

• Final written exam (duration: 2h) (100%)

Documentation:

Econometrics:

• Cameron, A. Colin and Trivedi, Pravin K. (2005): *Microeconometrics: Methods and Applications*, 1st edition, Cambridge University Press.

• Kennedy, Peter (2008): *A Guide to Econometrics*, 6th edition, Wiley-Blackwell.

• Stock, James H. and Watson, Mark M. (2012): *Introduction to Econometrics*, 3rd edition, Pearson.

Stata:

• Cameron, A. Colin and Trivedi, Pravin K. (2009): *Microeconometrics using Stata*, 1st edition, Stata Press.

• Kohler, Ulrich and Kreuter, Frauke (2005): *Data Analysis using Stata*, 1st edition, Stata Press.

• Long, J. Scott and Freese, Jeremy (2006): *Regression Models for Categorical Dependent Variables using Stata*, 1st edition, Stata Press.

Additional online resources:

• Chen, Xiao; Ender, Philip B.; Mitchell, Michael and Wells, Christine: *Regression with Stata*, Stata Web Books, Institute for Digital Research and Education, University of California – Los Angeles, <http://www.ats.ucla.edu/stat/stata/webbooks/reg/>

• Institute for Digital Research and Education: Resources to help you learn and use Stata, University of California – Los Angeles, <http://www.ats.ucla.edu/stat/stata/>

• Resources for learning Stata: <http://www.stata.com/links/resources-for-learning-stata/> (note: all user-written resources are commonly free of charge)

• The Stata Journal archives: <http://www.stata-journal.com/archives/>