- Faculté des sciences économiques
- www.unine.ch/seco

Applied Econometrics (5ER2020)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en sciences économiques, orientation politique économique	**Cours: 2 ph** **TP: 2 ph**	**écrit: 2 h**	6
Master en statistique	**Cours: 2 ph** **TP: 2 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:

Prof. Milad Zarin, Chair of Economics, Institute of Economic Research, A.-L. Breguet 2, CH-2000 NEUCHATEL +41 32 718 1355 - milad.zarin@unine.ch
Sandra Klinke, teaching assistant and PhD candidate, Institute of Economic Research, A.-L. Breguet 2, CH-2000 NEUCHATEL +41 32 718 1458 - sandra.gogniat@unine.ch
Ivan Tilov, teaching assistant and PhD candidate, Institute of Economic Research, A.-L. Breguet 2, CH-2000 NEUCHATEL +41 32 718 1954 - ivan.tilov@unine.ch

Objectifs:

The objective of this course is to introduce students to the use of econometric methodology and tools for analyzing various economic policy-related issues. The lectures aim at teaching students how to carry out sound empirical economic research by going through a number of interesting case studies that make use of state-of-the-art econometric techniques. During the exercise sessions, students get hands-on training in econometric modeling and conduct their own empirical research using real-world data and professional software.

Contenu:

The lectures are interactive and draw heavily on prior readings by the students. Readings are selected both for their econometric relevance and interest from an economic policy standpoint. The econometric methods and topics reviewed and developed include ordinary and generalized least squares, heteroscedasticity, serial correlation, seemingly unrelated regression, lagged dependent variables, distributed lag functions, instrumental variables, simultaneous equations, discrete-choice models, panel data, Granger causality, unit roots, co-integration, error-correction models, panel data analysis, etc.

Forme de l'évaluation:

TP-P-ES: Mixed assessment mode based on active participation in class (20% of the final grade), individual projects (40%) and a final 2-hour written exam during the last lecture of the semester (40%). By active participation is meant regular attendance during lectures and exercise sessions, careful reading of prescribed texts and voluntary participation in class discussions.
Retake: 2-hour written exam during the exam session (100% of the final grade).

Neither documents, nor connected objects are allowed during the exams.
In case of violation of these rules, the students are in situation of fraud and the unauthorized items will be removed. The exam could be deemed as failed.

Documentation:

There is no specific textbook for the course. We rely on original sources such as scientific journal articles, book extracts and technical reports. Readings will be made available on the e-platform Moodle prior to their discussion in class. The students are however advised to use at least one econometrics manual as reference for econometric techniques and their properties.

Pré-requis:

Requirement: having completed at least one econometrics course at the bachelor level.

N.B. Students who take this course as an elective are strongly advised to make sure they possess the required minimal knowledge in economics and quantitative methods. No distinction will be made between MScECON students and others in terms of evaluation criteria.

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2-hour lecture and 2-hour exercise session. The course makes extensive use of "active learning" methods, i.e. interactive teaching drawing largely on prior preparation, supervised individual and group work as well as active class participation by students. Lectures draw largely on prescribed readings as well as voluntary class participation. Exercise sessions are complementary to the lectures and provide the students the opportunity to apply econometric techniques to selected policy-related topics using real-world data, and report the results in their research papers eventually submitted for assessment. In the process, they learn to use specialized econometric software and get familiarized with national and international databases.