Longitudinal data models

ECTS
2 crédits

Composante
Polytech Annecy-Chambéry

En bref

> **Langues d'enseignement:** Anglais

> **Méthodes d'enseignement:** En présence

> **Forme d'enseignement :** Cours magistral

> **Ouvert aux étudiants en échange:** Oui

Présentation

Description

* Semester 9
* Duration : Within one semester
* Type: Mandatory
* Applicability: SOLEM course only
* Module examination: 100% final written exam.

Responsible person for the module: Andrea Rangel

Attaché Temporaire d'Enseignement et Recherche (ATER). Université Savoie Mont Blanc (USMB)., IAE, Laboratory IREGE

Objectifs

This class aims at giving students the tools to be able to conduct studies using econometric models on their own. To do so, the first part of the class will be devoted to econometric models (OLS, time-series, and panel). The second part of the class will expose students to apply the concepts learned through software manipulation and data analysis.

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Heures d'enseignement

Long run optimization (dynamic control) - CM	Cours Magistral	9h
TD	Travaux Dirigés	9h

Plan du cours

The class is divided into 9 hours of class (CM) and 9 hours of applications (TD). The students will learn to use different econometrics Softwares. During the TDs the students will first be exposed to the basic syntax of the software STATA and then use it to extract information from relevant environmental and energy economic datasets. The class is designed to i) present relevant papers in environmental and energy economics using each of the models and ii) for the students to be able to see the step-by-step process behind the calculations of each of the papers presented.

Plan
1. Review of the OLS model
2. Time series analysis
3. Panel data analysis

Evaluation
100% final written exam.

Compétences visées

Competences to be acquired:

1.Knowledge of three main econometric models to use when analysing data: OLS, time series models (AR, MA, ARMA) and panel data models (FE, RE, BE).
2.Being able to identify the most appropriate model to use according to the data set obtained.
3.Understanding the limitations of each of the models presented in class.
4.Being able to code and interpret the results for each of the models studied in the classroom.
5.Understand the syntax of the software use for the class (STATA).

Bibliographie

References:

• G.S Maddala & K. Lahiri (2009). Introduction to Econometrics. Fourth Edition. John Wiley & Sons.
• C. Baum & S. Hurn (2021). Environmental Econometrics Using Stata. STATA Pres.
• W. Keller & A. Levinson (2002). "Pollution Abatement Costs And Foreign Direct Investment Inflows To U.S. States, Review of Economics and Statistics, v84, 691-703.
• Wooldridge J. M. (2006). Introductory econometrics: a modern approach (3rd ed.). Thomson/South-Western.

Informations non contractuelles.
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Infos pratiques

Lieux

> Le Bourget-du-Lac (73)

Campus

> Le Bourget-du-Lac / campus Savoie Technolac

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